Human Resource and Training Needs Assessment and Strategies Report

PIMA Sector Partnership

September 1999

Final Report

Acknowledgements

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EXECUTIVE SUMMARY

Working on behalf of the PIMA Sector Partnership Steering Committee, TDR Human Resource Services Ltd. and with the Saskatchewan Department of Post–Secondary Education and Skills Training, Trimension Group conducted research to identify the human resource and training needs of the agriculture implement manufacturing sector in the province and to devise strategies for human resource and training planning.

INTRODUCTION

In order to develop and implement the most appropriate strategies for a proactive human resource plan for the industry, the PIMA Sector Partnership undertook a survey of PIMA members to identify human resource and training needs of the current and future requirements of the industry in both the technical and non-technical areas. This report presents the results of this research.

METHODOLOGY

The survey instrument was developed by Trimension Group in consultation with the PIMA Sector Partnership Steering Committee. A copy of the survey appears in an appendix to this report.

Respondents were drawn from the PIMA Membership Directory, specifically the list of regular members. Respondents will be restricted to only those 79 regular member companies in Saskatchewan. Interviewers were instructed to survey human resource or personnel managers, or in their absence the general manager. In total, 41 companies were interviewed.

Key findings from the survey were discussed by the Steering Committee to develop recommendations. In addition, key findings from the telephone survey and the recommendations developed by the Steering Committee were presented to employer and employee groups at PIMA member companies for discussion. Each group was asked the same set of questions. In total, two employer groups were held in Saskatoon and Regina and two employee groups were conducted in Saskatoon between February 1 and 12. At each of the employer groups three companies were present. Within each employee group, there were a variety of occupations present at the discussion groups. In addition, the findings from a similar discussion for the Export Manufacturing Sector Partnership were incorporated into the results.

The training curriculum phase of the project involved the following steps:

1. Identify any gaps in training offered compared to training needs in the industry.
2. Identify courses/ programs required for each area.
3. Make curriculum recommendations.
4. Identify processes for certification.

The recommendations regarding training and human resource issues were developed by the Steering Committee and were further refined in consultation with industry at the discussion groups with employers and employees.

KEY FINDINGS

Through the course of the research and discussions a number of key findings arose. The following summarize the more important ones:

- There is a relatively young workforce employed in the industry with almost two-thirds between the ages of 16 and 34.
- Although there has been a recent slowdown in the industry due to the agriculture commodity prices and the Asian economic meltdown, companies indicated they did anticipate growth in employment for the next year.
- Occupations where this growth is expected include welders, machine operators, labourers, painters, sales and front-line supervisors.
- Trends that are affecting companies as it relates to training needs are computerized technology changes, specialized skill requirements to operate the new computer controlled equipment and the need to expand to markets other than just agriculture.
- On-site company specific training is by far the most common approach companies undertake when it comes to skill development of their employees.
- Cultural diversity training for non-aboriginal employers and employees and preparing the workplace for aboriginal people are two initiatives that are very quickly requiring attention.
- The use of technology in the workplace will be increasingly important for companies in this industry due to competitiveness and productivity.
- Human resource planning within companies will be a requirement, in order to deal with things like change in workforce demographics, use of new technology, improved productivity, reduction of turnover, improved recruitment, and diversification.

RECOMMENDATIONS

The following recommendations are based on the results of the research and developed in consultation with the Steering Committee.

Training Needs

Companies in the industry generally support on-going training of their employees, mainly in job-specific skills, safety, and computers. Training accessibility is an issue and most companies prefer on-site and on-the-job training, and many use their own employees to deliver the training. Other improvements needed include having up to date equipment at training institutions and instructors with relevant industry experience. Research showed many employers are not aware of available training programs and funding sources; more effective communication is required.

Companies in the industry expect to see a growth in the number of people employed, especially among welders, labourers, machine operators, front-line supervisors, painters, and sales. Overall, companies reported few skill deficiencies and most of the skill areas focus on computer training and using new techniques and equipment.

Timing of training courses offered at training institutions emerged as an important factor as to whether or not companies decide to send employees.

Companies in general see the need for cultural diversity training as depending on whether Aboriginal people are employed in their company. Many felt that they currently have no strong need for such training as they have no problems or few Aboriginal employees. However, this will be a factor that needs to be dealt with in the very near future.

Recommendation: It is critical that PIMA and the industry continue and nurture the partnership with training institutions and providers and work to ensure there are adequate training spaces, programs and courses for employees entering employment and for existing employees. Where training does not exist, industry and training institutions must work together to develop these training programs.

- Strategy: In order to better plan training for the industry, companies must endeavour to use more human resource planning practices in terms of anticipating employment. Better planning would allow industry to continue to work with training providers to ensue there are enough graduates in related programs to meet their needs. PIMA must work with its members to develop this capability.

- Strategy: The database of available training programs must be kept current and available through PIMA to members.

- Strategy: PIMA should complete detailed job analyses for the various occupations in the industry. This information could be provided to SIAST and other training providers to determine if there are already training programs that exist or if programs need to be developed or brokered through another training institutions.

- Strategy: The research and gap analysis undertaken in this project identified the need for more formal industrial paint application training, thus building on these findings, a formal training program in industrial paint application should be developed and delivered on an as-needed basis, and coordinated through PIMA. This could be delivered either in-house using company staff as trainers or through an outside facilitator provided by PIMA, SIAST, other training providers, or through the regional economic development authorities.

  Additional development would need to be done at this time to bring the curriculum up to a state where all the courses/modules in the program can actually be delivered.

  This course should include modules in: orientation to industrial coatings applicators; interpretation of contracts, specifications, and legislation; selection and use of surface preparation methods; selection and use of application methods; recognition of safety and environmental obligations; math modules; use of equipment; quality; and powder coating. In addition, modules on WHMIS and Occupational Health and Safety may be included as prerequisite or follow-up training.

- Strategy: Additional courses currently available through other related industry associations should be investigated and offered by PIMA, such as the training program and performance assessment plan developed by the Association of Rotational Molders. This program includes:
  - Methods to determine current skill levels, identify deficiencies, training methods, and training required for a variety of occupations, from maintenance personnel to process/machine operators and supervisors.
  - Basic competencies required to prepare, start-up, and shut-down a rotational molding machine in a production environment
  - Documentation about the basic process involved in rotational molding.
  - Basic competencies required to take over, run, and monitor a rotational molding machine in a production environment

Recommendation: Industry should work with training providers and government to ensure information about training programs and funding is easily accessible to companies and maintained in a database.

- Strategy: Information on training programs and funding should be readily accessible to all industry members in the form of a centralized information source and regular promotion. PIMA serves a critical role in researching, housing, and distributing information to members about training programs and funding in a database.

  A database of all relevant training available for PIMA members was researched and developed through this sector partnership. PIMA will serve as a central contact for providing this information to members about training and funding programs. This information will be made available on paper and electronically in a database form, and made available through the Internet.

- Strategy: Tax credits and initiatives for companies offering training should be researched by PIMA to enable small and medium sized companies access to provincial training incentives.

Recommendation: Industry should continue to focus on developing and delivering in-house training programs. Training programs that can be delivered on-site address the issue of training accessibility. Encouraging internal training would address the need for trainers with industry experience and using up to date equipment as companies would be offering training using their own employees on their own shop floor.

- Strategy: Companies should implement training programs during slow periods to help with employee retention.

- Strategy: PIMA should partner with SIAST and other trainers to investigate and consider options for offering train the trainer programs for companies providing their own internal training. The existing workplace (OJT) training program offered by SIAST Woodland

Campus needs to be studied to determine relativity and appropriateness for adaptation to PIMA's needs.

- Strategy: Training should be more formalized by providing accreditation through the most appropriate agency. PIMA could serve as a certification body for companies' internal training programs by providing checklists of required skills for different jobs. These checklists should be developed by PIMA, industry, and training providers. The checklists could be used as a basis to provide structure to on-the-job training currently being provided by industry. In addition, training would be considered as certified by PIMA providing employees with recognition. These checklists could be used as a basis to determine whether the training can be accredited by SIAST.

- Strategy: PIMA must contact all the training providers identified or mentioned in this project to ensure their name and a contact is on the Association's mailing list so they can receive vital information about needs identified and to open the lines of communication even more.

Recommendation: The process of identifying aboriginal issues has been started through this project and although there has been no issues identified at this time, PIMA and members are aware there are potential for issues in the industry in the future and they will need to be vigilant and prepared to respond when necessary.

- Strategy: PIMA will work with training providers to gather information about training courses or seminars on cultural diversity and Aboriginal issues. Information should be provided to members and distributed through their newsletter.

- Strategy: PIMA will need to meet with and develop partnerships to exchange information with Aboriginal groups and agencies.

- Strategy: First Nations and Métis leaders must emphasize the importance of employability skills to Aboriginal peoples by incorporating courses on these topics within their training programs.

- Strategy: Industry and Aboriginal organizations and training institutions, such as the Dumont Technical Institute and the Saskatchewan Indian Institute of Technology, must work together to address training and human resource issues and ensure that their training programs meet industry needs. This can be achieved through on-going and open dialogue between PIMA and Aboriginal organizations.

Recruiting and Retention

Some companies have difficulty recruiting because of rural location (housing) and competition from other companies in industry, as well as there being a lack of skilled people available. One issue of concern to this industry is that young people may not be attracted to the industry and prefer working in an office or similar environment as opposed to outdoors or on a shop floor.

Companies with retention problems cited poor employability skills, their rural location, and competition from other industries (money and location). Most just accept turnover as part of doing business and address it through recruitment or by offering better pay, benefits, and trying to improve the work environment. Companies are having difficulty in recruiting skilled welders, journey persons in some of the other trades (especially maintenance), engineers, machine operators, painters, and accountants.

Anticipated changes in the Saskatchewan labour market such as more women working, more Aboriginal people entering the workforce and a rural to urban shift are issues for companies that can be overcome. They feel that their hiring policy of selecting the best person for the job addresses these challenges.

Companies expressed their difficulties in attracting and keeping skilled labour in Saskatchewan, especially rural Saskatchewan, when many skilled, young people are moving away. Many employers cited the high personal income tax and sales tax as being a major issue.

Younger and new employees may be lacking employability skills. Another related challenge is that they are highly mobile and they may be unwilling to stay in the Province when they can go elsewhere for more money. Some may not be attracted to life in a rural community. This, combined with the cyclical nature of the industry, leads to challenges in retaining a skilled workforce.

Recommendation: Courses or support in employability skills training should be offered to current employees, as well as using better recruiting practices.

- Strategy: Employees must be made aware of the importance of employability skills in the workplace.

- Strategy: PIMA should develop an outline of employability skills as well as practical guidelines for employers to use when recruiting and selecting employees to ensure those they hire do have the skills needed to be successful at work.

- Strategy: SIAST and other training providers should ensure life skills or employability skills component be included in technical skills training.

- Strategy: PIMA will work with industry to develop a generic orientation checklist that would assist members in the orientation task. The orientation should be provided to new employees and be included in an employee handbook. Companies need to explore the use of mentoring more formally in the workplace.

Recommendation: Companies need to be more proactive in competing for labour in Saskatchewan. This includes anticipating changes in terms of demographics and adapting

recruitment policies to fit the situations. Industry must also look for ways to encourage retention of employees.

- Strategy: PIMA should promote the industry overall through a public relations campaign to generate overall awareness of the industry.

- Strategy: PIMA must promote the industry to the high schools and youth by making career information readily available to high school guidance counsellors and through involvement with the schools at career fairs. The industry should be promoted as highly technical and advanced.

- Strategy: PIMA should work with training institutions to offer co-operative education, work experience practicums or summer employment in those occupations for which they have difficulty recruiting in this way it could address their needs as well as attract young people into the industry.

- Strategy: Recruitment needs to be focused more on attracting Aboriginal people and women in the workforce.

- Strategy: There needs to be innovative approaches to promote living and working in rural communities. We should learn from the successes of companies who have achieved this. These companies could serve as role models for other companies facing this challenge. PIMA could profile their successes in the newsletter and during their annual conference or when members visit a work site.

- Strategy: When recruiting, companies should advertise the benefits of living and working in their community. This way they will attract individuals to their community that would be interested and informed about the merits of this lifestyle and may be more inclined to become permanent residents.

- Strategy: Retention strategies need to be researched by our Provincial government that will promote the benefits of staying in the Province. This could include stressing higher costs of living in other regions due to costs such as that for health care and insurance.

- Strategy: PIMA should continue to work with the government in a consultative manner to develop a solution for this long-term issue of people leaving the province. Joint discussion and cooperative ventures are the best solution.

Communication Strategy

Recommendation: The results of the training and human resource needs assessment and the recommendations of the Steering Committee should be publicized.

- Strategy: PIMA will provide an executive summary to members through the newsletter and at the annual convention.

- Strategy: The media needs to be contacted to publicize the findings of the study as a way of promoting the industry.

Sector Partnership

Employers and employees feel companies should continue to work together to address training and human resource issues for the agriculture implement manufacturing industry. PIMA should provide information on these issues to industry.

Recommendation: Industry should continue to work together to identify and address training and human resource issues.

- Strategy: PIMA has a role to play in terms of providing on-going co-ordination to the Sector Partnership.

- Strategy: Individual companies should continue to participate in addressing training and human resource issues through the Sector Partnership Steering Committee, by being requested or asked to provide input into what's happening in the industry and meeting at least annually to discuss developments, issues and needs.

Next Steps

The research and the work of the industry Steering Committee has revealed many relevant recommendations and strategies by which to consider. PIMA in consultation with the Steering Committee now needs to take these key recommendations and strategies to the next level, which is implementation. Those recommendations which are deemed most important are the ones which should be undertaken as the next steps. Those that were identified by the Steering Committee are as follows:

- PIMA will continue discussion with the Steering Committee and industry in nurturing and developing a strong partnership with the training institutions, especially SIAST, the regional colleges, DTI and SIIT by:
  - Making available and keeping current the training database of all courses and programs offered through these institutions; and
  - Identifying in the planning process ways to address issues such as training for new employees, retraining existing employees, addressing skill shortages, accessibility and better workplace training methods.
- PIMA will circulate back to the industry the results of the study and the on-going work of the Steering Committee through:
  - Publishing articles in the monthly newsletter "The PIMA Pulse";
  - Raising items of importance at such venues as the PIMA annual conference; and
  - Preparing a news release on the highlights and key findings.
- PIMA will start discussions with industry on aboriginal participation in the workforce and work with aboriginal organizations and training providers/consultants in gathering and

publishing information on causes and seminars on cultural diversity and workforce participation.

- PIMA will work with SIAST and the regional colleges to attain the necessary standards and certification of the Industrial Applications and Rotational Molders training programs, as well as other courses and programs that will become necessary as jobs change and new technologies emerge.
- PIMA will work industry and the Steering Committee to develop an outline of the employability skills necessary for employers to use when recruiting and selecting new employees.
- PIMA will work to develop a generic orientation checklist which will assist companies during the orientation process of new employees. This orientation is to be provided to all new employees and if available, the checklist should be included in the company's employee handbook.
- PIMA needs to continue to explore and facilitate opportunities and research methods by which companies can implement the use of technology in the workplace.

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1.0 Introduction

The Prairie Implement Manufacturer's Association (PIMA) is the association representing the agricultural equipment manufacturing industry in Saskatchewan and Western Canada. In Saskatchewan, the industry includes approximately 100 manufacturers with $600 million annual sales and 6,000 employees. The mission statement of PIMA is "to foster an promote growth and vitality of PIMA members in the Canadian agricultural equipment manufacturing industry."

Over the past 40 years the industry evolved from its beginnings as small entrepreneurial family operated companies to an industry that has grown in size, sophistication and value. To address the changes that have occurred and to prepare for the changes that the industry is facing today, PIMA secured funding through the Sector Partnership initiative of Saskatchewan Post-Secondary Education and Skills Training.

The objectives of the Sector Partnership project were to:

- Identify training and skill needs of existing and new employees.
- Identify possible changes and growth areas in the industry and determine what impact these will have in support sectors.
- Perform gap analysis of current and future training requirements.
- Begin human resource planning for the sector.
- Identify existing and new/innovative approaches to training which meets industry needs and circumstances, and
- Build sector partnerships and facilitate sector coordination.

The Sector Partnership focused on key deliverables which were:

- Literature and Program Review
- Human Resource and Training Needs Assessment Study
- Validation of the findings of the study
- Development of industry recommendations and strategies for implementation
- Final report that will provide direction for PIMA and its members in the coming years.

This report presents the results of the work undertaken by the industry Steering Committee and the research conducted by Trimension Training and Consulting Group Inc. on their behalf.

2.0 Literature and Program Review

In order for the industry Steering Committee and the consultant to better understand what is currently occurring in the industry, a review of various published and unpublished reports was conducted by Trimension Group. The results of the work produced a report which included:

- An overview of the agriculture implement manufacturing industry including the type and number of companies involved in the sector and current employment levels;
- Identification of any human resource and training issues; and
- Identification of any critical issues requiring further primary research.

In addition to the review of reports, the second components of the secondary review was to identify current training programs and courses applicable for the industry that are available in Saskatchewan.

The results were published in a separate report named Literature and Program Review and copies are available from the PIMA office or Post-Secondary Education and Skills Training.

3.0 Methodology

3.1 HUMAN RESOURCE AND TRAINING NEEDS ASSESSMENT

The survey instrument was developed by Trimension Group in consultation with the PIMA Sector Partnership Steering Committee. A copy of the survey appears in an appendix to this report.

Respondents were drawn from the PIMA Membership Directory, specifically the list of regular members. Respondents will be restricted to only those 79 regular member companies in Saskatchewan. Interviewers were instructed to survey human resource or personnel managers, or in their absence the general manager. In total, 41 companies were interviewed.

NorSask Consumer Interviewing Services, a professional interviewing service in Saskatoon, was subcontracted to conduct the telephone surveys. Data was collected between September 28 and October 7, 1998. Data from the survey was analyzed using *SPSS for Windows*, a statistical software package.

3.2 INDUSTRY VALIDATION

Key findings from the survey were discussed by the Steering Committee to develop recommendations. In addition, key findings from the telephone survey and the recommendations developed by the Steering Committee were presented to employer and employee groups at PIMA member companies for discussion. Each group was asked the same set of questions. In total, two employer groups were held in Saskatoon and Regina and two employee groups were conducted in Saskatoon between February 1 and 12. At each of the employer groups three companies were present. At each of the employee groups, five employees were present representing a range occupations. In addition, the findings from a similar discussion for the Export Manufacturing Sector Partnership were incorporated into the results.

3.3 TRAINING CURRICULUM

This phase of the project involved the following steps:

1. Identify any gaps in training offered compared to training needs in the industry.
2. Identify courses/ programs required for each area.
3. Make curriculum recommendations.
4. Identify processes for certification.

3.4 RECOMMENDATIONS

The recommendations regarding training and human resource issues were developed by the Steering Committee and were further refined in consultation with industry at the discussion groups with employers and employees.

4.0 Human Resource and Training Needs Assessment

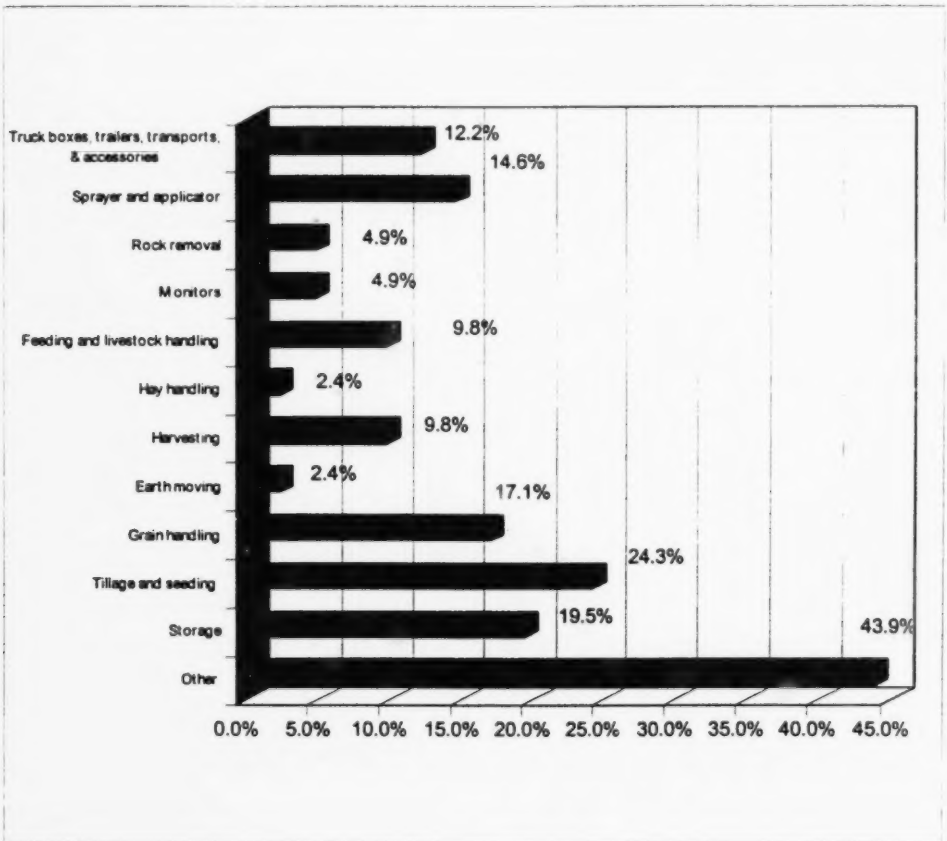
In order to gain a broad understanding of the human resource and training issues in the agriculture implement manufacturing sector, 41 PIMA regular members (in Saskatchewan only) companies were asked a series of questions on these topic areas. Questions included business areas, work force profile, trends in employment and in the industry, skill deficiencies and new skills, training, and recruitment and retention.

In addition, to assess respondents' perception of the issues facing the industry, they were asked to identify the most pressing human resource and training issues and to suggest ways to resolve these issues. The following is the detailed report and analysis of the survey.

4.1 COMPANY INFORMATION

Companies were asked to name the business areas in which they compete. The most common responses were tillage and seeding (24.3%), storage (19.5%), grain handling (17.1%), sprayers and application (14.6%), and truck boxes, trailers, transports, and accessories (12.2%).

Figure 1 Business Areas

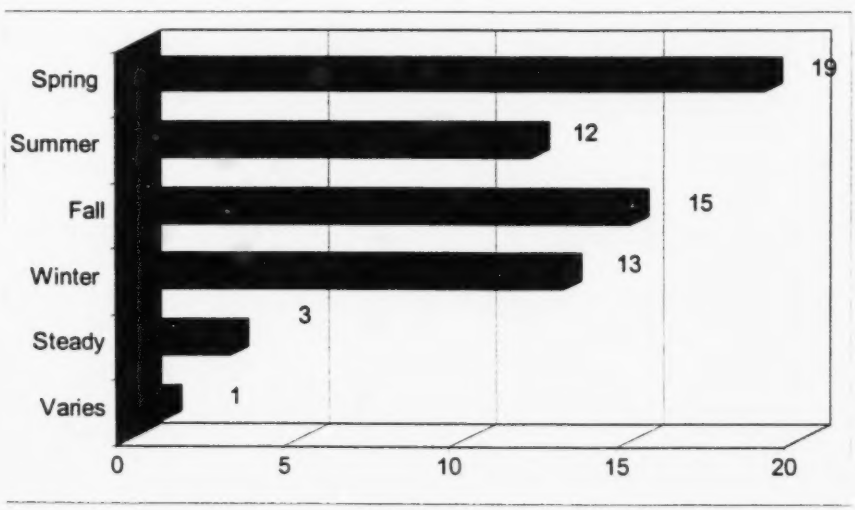


Other business areas mentioned include:

- Tarpaulins (2)
- Aerator circulator for lagoon, liquifying composter
- Custom machining and fabricating
- Custom manufacturing
- Electronic monitoring equipment
- Fencing
- Field markers
- Fuel tanks, sewage storage tanks
- Grain cleaning
- Grain dryer and construction heater
- Grain vacuums
- Highway drainage, steel buildings, cladding and roof sheeting, seamed roof system
- Hydraulic cylinders, tractor attachments, mini skid steers
- Mining equipment
- Seed treating equipment
- Ventilation for livestock buildings
- Weigh scales, ultrasonic control systems
- Wheelchair lifts for handicapped farmers

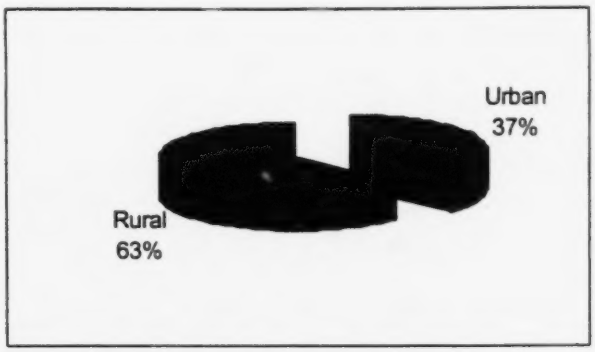
A peak production time for many (19) companies is Spring.

Figure 2 Peak Production Times



In addition, 37% of companies surveyed are in urban communities (Saskatoon, Regina, Swift Current, or Yorkton).

Figure 3 Location



4.2 WORKFORCE PROFILE

The following table shows employment levels during low and peak production periods for the current year, last year, and anticipated employment levels for 1999. Employment levels decreased 12% from 3,161 to 2,780 during the low production periods between 1997 and 1998. Companies however are anticipating growth for next year with employment expected to increase 25% from 2,780 to 3,468 during low production periods and increases of 4% during peak production times from 3,687 to 3,820.

Table 1 Employment Levels for 1997, 1998, and 1998

Year	Low	Peak
1997		
Average	77	91
Median	25	28
Sum	3161	3716
Minimum	2	4
Maximum	1400	1500
1998		
Average	68	90
Median	25	25
Sum	2780	3687
Minimum	2	4
Maximum	675	1375
1999		
Average	85	93
Median	30	30
Sum	3468	3820
Minimum	2	4
Maximum	1400	1400

Almost two-thirds of the workforce is between the ages of 16 and 34. In general, the workforce in the agriculture implement manufacturing industry is quite young compared to provincial averages.

Table 2 Age of Employees

	16-24	25-34	35-44	45-54	55 and over
Number	946	1003	759	340	107
%	31%	33%	25%	11%	4%
Employed Labour Force: Provincial averages*	17%	27%	25%	16%	15%

*Statistics Canada, Census 1996.

As shown in the following table, 16% of workers have a post-secondary certificate or diploma compared to a provincial average of 5%. In general, the industry has above average levels of education.

Table 3 Educational Attainment of Employees

	< Grade 9	Grade 9 - 12	Grade 12 Completion	Some Post-secondary	Post-secondary certificate or diploma	University Degree
Number	29	421	1608	319	513	320
%	0.9%	13%	50%	10%	16%	10%
Employed Labour Force: Provincial averages*	9%	27%	13%	35%	5%	11%

*Statistics Canada, Census 1991.

4.3 TRENDS

Employers were asked to project the level of employment for key occupations for the next year, specifically for those occupational categories used in the PIMA Production Line Salary Survey. In addition, some respondents offered information for other occupations. The following table summarizes the results. Numbers are calculated based on the number of companies (n) able to provide growth expectations. In general, companies expect to increase employment in all occupations, with the highest growth in terms of number of positions among welders (68), labourers (32), machine operators (24), front-line supervisors (17), painters (15), and sales (13).

Table 4 Current and Expected Employment for 1999 by Occupation

Occupation (n=Number of companies)	Number Employed		
	Current	Expected in 1 Year	% Change
PIMA Salary Survey Categories			
Production line welders (n=32)	814	882	+8.4%
Painters (n=27)	143	158	+10.5%
Machine operators (lathe, press, drill, ironworker, shears, mill, saws) (n=30)	514	538	+4.7%
Fork-lift operators (n=16)	60	62	+3.3%
Shipping and receiving (n=23)	118	125	+5.9%
Mechanics (n=12)	34	37	+8.8%
Senior managers (n=39)	266	275	+3.4%
Sales (n=25)	162	175	+8.0%
Front-line supervisors (n=30)	182	199	+9.3%
Receptionist (n=23)	32	31	-3.1%
Secretary (n=13)	23	23	-
Book-keeper (n=20)	34	36	+5.9%
Accountant (n=19)	32	33	+3.1%
Other Occupations			
Administrative assistant (n=2)	10	11	+10.0%
Assembler (n= 9)	39	48	+23.1%
Buyers/purchaser (n=11)	23	23	-
Clerical (n=1)	7	7	-
Computer technicians (n=1)	2	2	-
Construction consultant (n=1)	1	1	-
Customer service (n=1)	2	2	-
Data processors (n=2)	8	8	-
Dealer development co-ordinator (n=1)	4	4	-
Dealer support (n=1)	3	3	-
Drafting (n=1)	1	1	-
Electricians (n=1)	10	10	-
Engineer (n=13)	52	56	+7.7%
Engineering technicians (n=1)	3	3	-
Executive assistant (n=1)	2	2	-
Graphic designer (n=1)	2	2	-
Information technologist (n=1)	1	1	-
Inventory (n=1)	1	1	-
Labourer (n=16)	439	471	+7.3%
Machinist (n=1)	1	2	+100.0%
Material handlers (n=1)	5	5	-
Maintenance (n=1)	7	7	-
Marketing (n=4)	7	7	-
Materials management (n=1)	15	15	-
Mechanical technologist (n=1)	2	2	-
Office manager (n=1)	1	1	-
Order processing (n=1)	5	5	-
Planner (n=1)	1	1	-
Maintenance (n=1)	60	60	-
Production (n=1)	8	6	-25.0%
Production control (n=1)	5	6	+20.0%
Quality control (n=1)	1	1	-

Repair technician (n=1)	1	1	-
Research and development (n=10)	144	144	-
Shotblast personnel (n=1)	4	4	-
Traffic controllers (n=1)	2	2	-
Trainer (n=1)	1	1	-

Some of the trends affecting companies in terms of training needs include:

- Computer technology changes (9)
- Lack of qualified people (5)
- Skill shortages among specialized workers to hire i.e. welders and computer controlled equipment operators and painters (4)
- The loss of qualified workers going West (3) i.e. welders, mechanical technologists
- On job training due to rural location of business (3)
- Need to expand into other markets other than agriculture (2)
- Increased demand for quality (2)
- Money
- Required to do more than one area or job
- Lack of accessibility to courses offered due to distance
- Candidates with weak mathematical skills
- Required to use AutoCAD to customize and meet the customer's individual needs
- Require more skilled labour as a result of computerization
- Hire local people; workers won't travel from Regina or Weyburn to work
- Sending employees to Eastern Canada and U.S. to be trained
- Increased competition
- Information technology
- Upgrade to a computerized manufacturing process
- Increased demand for new products
- Potential employees must have more training than high school now due to more sophisticated processes
- Changes in government regulations and Measurement Canada
- Lack of housing for employees
- Computer skills are now important
- Customer service
- Leaders in the industry, all training is performed in house due to new trends and ideas
- Must supplement employees education with in-house training
- Increasing "just-in-time" demands from the customers

4.4 SKILL DEFICIENCIES AND NEW SKILLS

The following table presents key occupations in the industry and areas in which employers feel they need more training. Respondents were asked to consider technical training, safety training, interpersonal skills training, and employability or "life skills" training.

Table 5 Skill Deficiencies

PRODUCTION LINE WELDERS Hands-on technical skills (2) More extensive training in different procedures The certification of production line welding and MIG Completion of journeyman MIG welding course Basic production Quality and equipment handling Get skills upgraded and current The ability to read drawings Electronics training Welding with galvanized steel Blueprint reading and basic fabrication Better upgrading	**FRONT-LINE SUPERVISORS** A new man is just learning to be a supervisor General interpersonal skills Leadership Manufactured Resource Planning Supervision skills
PAINTERS More industrial applications The ability to use more equipment The new kinds of paint and techniques Higher expectations from the clients in terms of quality and variety Quality and equipment handling Proper use of equipment and maintenance of it Better upgrading	**RECEPTIONIST** General computer training (2) Training on the new computerized inventory system Internet training Additional training on accounting package Require more computer training
MACHINE OPERATORS The ability to read drawings (2) More computer controlled equipment Advanced machinists Hands-on technical skills Operation of equipment and quality checking Metal fabrications The ability to do transitions The ability to do the whole job rather than just components of it	**SECRETARY** Require more computer training (2) Internet training Additional training on accounting package
SHIPPING AND RECEIVING Training on the new computerized inventory system	**BOOK-KEEPER** Require more computer training (2) Internet training Training on the new computerized inventory system Additional training on accounting package

SENIOR MANAGERS Require computer training (2) Leadership Manufactured Resource Planning Business writing	**ACCOUNTANT** Leadership Manufactured Resource Planning General computer accounting
ENGINEERING TECHNICIANS Computer design programs Computer training	**ADMINISTRATIVE ASSISTANT** Leadership Manufactured Resource Planning
ELECTRONIC ASSEMBLER More component information so they know what different components do.	**RESEARCH AND DEVELOPMENT** Computer training
PURCHASER Training on the new computerized inventory system Leadership Manufactured Resource Planning Interpersonal skills	**LABOURERS** The ability to read drawings Hydraulics
ENGINEER Training on the new computerized training system Leadership Manufactured Resource Planning Technical skills Information technology	**MACHINIST** Mould design and making techniques

Companies also had the following comments about areas where training is needed:

"Generally everyone needs life skills training."

"People need the initiative to work."

"Helpers should be able to do the work without constantly being told what to do."

"The people on the shop side have problems getting to school on time. They try to play hooky like they did in school."

"ISO 9000 is an ongoing thing to make sure everyone understands and stays updated."

"Everyone in the company needs training in leadership theory."

The following table presents key occupations in the industry and areas in which employers feel they need new skills training in the near future. Respondents were asked to consider technical training, safety training, interpersonal skills training, and employability or "life skills" training.

Table 6 New Skills Required

PRODUCTION LINE WELDERS More computerized machinery skills (2) Specialized welding New equipment and electronics Adapting to robotic welders Use of manufacturing control software specific to the job Ability to access and use inventory control software	**SALES** Computer training Ongoing interpersonal skills training Use of manufacturing control software specific to the job
PAINTERS More computerized machinery skills (2) Technical paint ISO issues Use of manufacturing control software specific to the job Ability to access and use inventory control software	**FRONT-LINE SUPERVISORS** Front line supervision program from PIMA Human resources and personnel management Production training Use of manufacturing control software specific to the job Ability to access and use inventory control software
MACHINE OPERATORS More computerized machinery skills (2) Use of manufacturing control software specific to the job Ability to access and use inventory control software specific to the job	**RECEPTIONIST** Computer training (2) Ongoing interpersonal skills training Upgrading computer skills/new uses Use of manufacturing control software specific to the job
FORK-LIFT OPERATORS Use of manufacturing control software specific to the job Ability to access and use inventory control software	**SECRETARY** Computer training (2) Upgrading computer skills/new uses Use of manufacturing control software specific to the job
SHIPPING AND RECEIVING Use of manufacturing control software specific to the job Ability to access and use inventory control software	**BOOK-KEEPER** Upgrading computer skills/new uses Computer training Use of manufacturing control software specific to the job
MECHANICS Use of manufacturing control software specific to the job	**ACCOUNTANT** Computer training (2) Ongoing interpersonal skills training Upgrading computer skills/new uses Use of manufacturing control software specific to the job

SENIOR MANAGERS Computer training (2) Ongoing interpersonal skills training Upgrading computer skills/new uses Human resources and personnel management Use of manufacturing control software specific to the job "Just -in-Time " computer training	**RESEARCH AND DEVELOPMENT** Computer training
LABOURERS As equipment is updated, they will have to learn to turn programmable logistical controls	**PURCHASER** Ongoing interpersonal skills training Materials management
ENGINEERS Ongoing interpersonal skills training	**PRODUCTION SUPERVISOR** Computer training
NEW POSITION (REQUIRE CAD TRAINING) This would lead to CNC equipment and training for machinists	**MECHANICAL TECHNOLOGISTS** Computer training

Companies also had the following comments about training needed in the future:

"On-going upgrading for all employees."

"People will need to become more familiar with computers throughout the whole company if we change things the way we are thinking of."

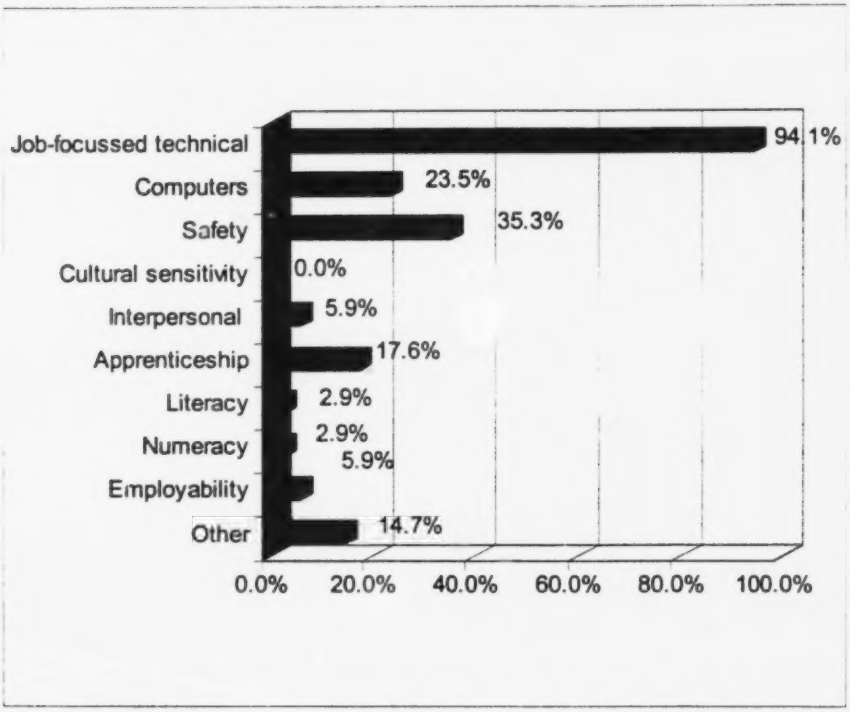
"Everyone will have to enhance their management skills as they move up in the company."

"Will need more plumbers and gas fitters."

4.5 TRAINING

83% (or 34 companies) provide internal training on-site to employees using their own company trainers or employees. Of those 34 companies the most common areas of training included job-focussed technical skills, safety, and computer training.

Figure 4 Internal Training Provided



Other training areas include:

- Future Skills
- Supervisory skills
- Management development
- Manufacturing resources
- ISO 9000
- Communication
- Time management
- Conflict resolution
- Personal development

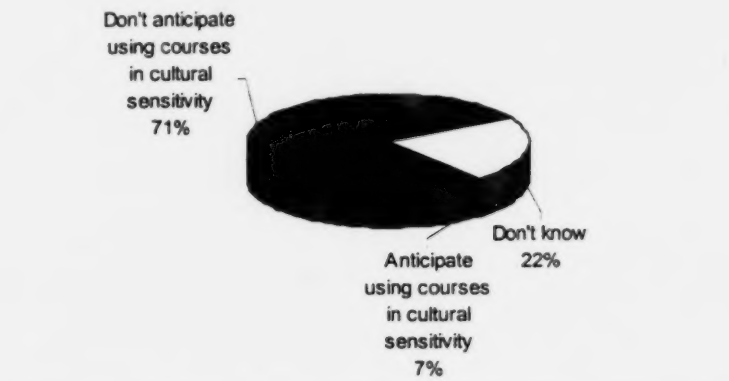
68% (or 28 companies) currently use training course or programs provided by other training providers. The most common areas of external training included job-focussed technical skills (generally off-site), safety (both off and on-site), and computers (generally off-site). Companies rely on SIAST and regional colleges, as well as PIMA for training. The following table shows the details for those 28 companies.

Table 7 External Training Provided

Type of Training	%	Training Provider	On-site	Off-site	Both
Job-focussed technical skills	61%	SIAST Kelsey (5) SIAST Moose Jaw (4) Carlton Trail (3) Manufacturers (3) Regional colleges (2) SaskPower PIMA Consultants SIAST Wascana Parkland College Ron Chyz	28%	67%	6%
Computers	29%	Manufacturers (3) Regional college (2) SIAST Kelsey Consultant Head office	22%	67%	11%
Safety	36%	Community college (3) Occupational health and safety (3) PIMA Workers compensation Red Cross Private agencies	50%	50%	
Cultural sensitivity/race relations	0%	-	-	-	-
Interpersonal skills	18%	PIMA (3) Fred Pryor Meyers, Norris, Penny Skill Path Consultant Various	20%	80%	
Apprenticeship	7%	SIAST Kelsey (2) PIMA	100%	-	-
Literacy	0%	-	-	-	-
Numeracy	0%	-	-	-	-
Employability (life) skills	4%	REDA	100%	-	-
Other (Includes: accounting, business and management, exporting/purchasing, forklift operator, front line supervisor (3), office procedures, organizational, overhead crane, professional development, quality assurance, sales (2), production, time management)	46%	Career Track (2) SIAST Moose Jaw Ron Morris Skill Path PIMA Head office Fred Pryor Hoggard and Associates ISO 9000 Accounting association	18%	82%	-

Given the expected increase in Aboriginal people of working age in the province, 7% of companies anticipate using course in cultural sensitivity or race relations, while 71% do not expect to use such training. 22% of companies stated they "don't know" whether they will implement such programs.

Figure 5 Plan to Use Course in Cultural Sensitivity


Don't anticipate using courses in cultural sensitivity 71%
Don't know 22%
Anticipate using courses in cultural sensitivity 7%

They gave the following reasons:

YES

"If there was a need. When there were Aboriginal employees on staff, there was not a problem."

"Possibility for the supervisory group, if more Aboriginal workers apply. Currently have a problem of attracting and retaining Aboriginal employees."

"If they were offered, I would look at them because of the challenges they face and make changes to allow them to fit in."

NO

"Currently have Aboriginal people in workplace and have not had a problem." (7)

"Haven't seemed to have any problems with that yet." (5)

"Never thought about it." (4)

"There has never been an Aboriginal applicant." (4)

"Don't need it." (2)

Companies were asked to rate a number of factors they consider when using training programs on a scale of 1 to 5 where 1 is strongly disagree and 5 is strongly agree. The following table shows the average rating and the percentage answering 4 or 5, as well as the number of companies responding to the question (n). Clearly "value to business" and "timing of training" during the year emerged as key considerations to employers when making decisions about training.

Some of their comments regarding these two factors include:

VALUE TO BUSINESS

"If it has no value - I have no interest in it."

"As far as we have more problems meeting the demands of our customers. The better the product, the easier it is to market it around North America."

TIME OF TRAINING DURING THE YEAR

"We would look at it off peak season so the person can concentrate."

"Our work is seasonal."

"There are certain times of the year that I can spare more people."

"We would like our training not during farm time."

"There are some seasons where we are too busy and couldn't get away."

Table 8 Factors Considered Regarding Training

Factors	Average Rating	% Answering 4 or 5
Cost to send employee (lost work time) (n=38)	3.4	45%
Dollar cost of program/fees (n=39)	3.2	38%
Length (n=39)	3.3	44%
Location (n=39)	3.5	56%
Value to business (n=39)	4.5	87%
Timing of training during the year (n=39)	4.3	82%

Other factors companies consider include:

- Benefit to the employee (3)
- Pertinence to business/industry (2)
- Budget plans for department training
- Course offering
- Employee attitude
- If they will stay around after
- Job specific relevance
- Length of time they've been with me
- Quality of course
- Return I get from employee for new contracts
- Tours of places that use the concept
- Transferability
- Whether person feels he needs training
- Whether the employee will stick around
- Who is qualified to send
- Ability of the person to be trained

Companies were asked to rate a number of delivery methods for technical skills training on a scale of 1 to 5 where 1 is very poor and 5 is excellent. The following table shows the average rating and the percentage answering 4 or 5, as well as the number companies responding to the question (n). "Workplace training," "job coaching/mentoring (on-site training of company employees and/or supervisors)" and "combination of classroom and workplace training" are the preferred ways to train employees for technical skills. It is interesting to note that fewer companies were able to rate CD ROM/computer based training and Internet training largely due to respondents lack of experience or knowledge of this type of training

Some of their comments include:

WORKPLACE TRAINING

"It's more hands on and get more of a feel for things."

"Ideal situation. They retain more."

"Using their own equipment and someone right there with them."

"It depends when the training is. During peak times there would be a possibility of making too many errors in training."

JOB COACHING/MENTORING

"One on one and on the workplace - more effective."

"It's on site. Familiarity with everything."

"We find it works best. Work with them on the job and monitor their progress."

"Each company is run differently and each employee has to learn the policies and procedures in order for the company to succeed."

"Because our business is so specialized you can't really get the training as we need it."

COMBINATION OF CLASSROOM AND WORKPLACE TRAINING

"Combination may be better than either one."

"Learn in classroom and then go and do it on the floor."

"That way you don't disrupt their work and they still get the knowledge. It really depends on the course and who is taking the course."

"They get the theory and the practical"

"Because of the comfort level of being in a familiar environment. The classroom would give you time to think about things rather than having to do it right away. Variety is always important in the learning process."

Table 9 Delivery Methods for Skills Training

Delivery Methods	Average Rating	% Answering 4 or 5
Classroom training (n=38)	3.1	29%
Workplace training (n=40)	4.4	90%
Combination of classroom and workplace training (n=40)	4.1	78%
Correspondence courses (n=36)	2.1	11%
CD-ROM or computer based training (n=29)	3.0	31%
Courses over the Internet (n=22)	2.3	23%
Job Coaching/Mentoring – On-site training of company employees and/or supervisors (n=40)	4.4	88%

Other training options include video as a "good way to teach some courses in a group" and work education programs for high school students to allow them to make better career choices.

Companies were asked to rate a number of potential areas for improvement for training programs for this industry on a scale of 1 to 5 where 1 is not at all necessary and 5 is very critical. The following table shows the average rating and the percentage answering 4 or 5, as well as the number companies responding to the question (n). The most necessary improvements include: "trainers with industry experience," "more input from industry," and "more technical skills training."

Some of their comments regarding these three improvements include:

TRAINERS WITH INDUSTRY EXPERIENCE

"They have the background and know what they've come up against on the floor."

"If they haven't been there and done that, they aren't much good to anybody."

"Otherwise they are dealing with idealistic situations and not the real world."

"The more they know about the industry, the more they can help you."

MORE INPUT FROM INDUSTRY

"Then industry can design the courses they feel are most necessary."

"I don't think that the technical schools are listening to the smaller businesses in industry."

"We're the people who should be telling them what we need."

"I don't think anyone listens to us anyway."

"They never listen to us or find out what we need."

"Because of making sure length is suitable. Make sure that course outline is meeting the needs in the area and make sure the courses are available when we need them."

"A lot of people at the top are way out of touch."

MORE TECHNICAL SKILLS TRAINING

"There's always room for improvement on technical skills."

"It seems that we have problems with the training providers not hitting the mark. There seems to be a time lag problem where they can't seem to jump to it and get ahead of our demands."

"Everything is constantly changing in technology."

"From the experience we've had. They've passed their tests but still need training in the real world. They may be learning in the books but don't know how to apply it."

"Industry is still ahead in technology but the programs have come a long way in the past year to try to catch up."

Table 10 Improvements to Training

Improvements	Average Rating	% Answering 4 or 5
More technical skills training (n=35)	3.7	66%
Larger capacity programs (n=32)	1.9	13%
Length of courses (n=31)	2.4	29%
More input from industry (n=35)	3.8	69%
More emphasis on employability or life skills (n=30)	3.4	53%
Trainers with industry experience (n=35)	4.3	89%

Other improvements suggested include: holding training in the winter, making training more accessible to rural companies, centralizing information about courses, and making sure trainers and equipment are up to date.

Respondents were also asked what they would suggest as an appropriate length for a training course (Table 11). Almost one-quarter of companies felt that the current lengths of courses seemed appropriate.

Table 11 Suggested Length of Courses

Respondents Suggestions	Number of Responses
Current course lengths seem appropriate	9
Course length required depends on type of training offered	6
2 - 3 days	4
60 hours	1
<1 week at a time	2
1 month	1
Maximum 4 weeks	1
6 weeks	1
6 week course broken down into two 3 week intervals	1
3 month apprenticeship	1
3 - 6 months	2
Minimum 6 months	1

Of the respondents who suggested a more appropriate time length for individual courses, the average was 35 days of training.

Other areas for improvement mentioned include: offering courses in winter, making programs accessible to companies not located in major centres, centralized source for training information, skills upgrading for instructors, and the use of up to date equipment.

4.6 RECRUITMENT AND RETENTION

Companies were asked to rate a number of potential barriers to attracting skilled labour on a scale of 1 to 5 where 1 is strongly disagree and 5 is strongly agree. The following table shows the average rating and the percentage answering 4 or 5, as well as the number companies responding to the question (n). In general people did not strongly agree with these issues as barriers to recruiting employees. The most significant barriers to attracting skilled labour include: "people don't want a rural lifestyle," "competition from other companies in the industry," and "lack of technically skilled labour."

Some of their comments regarding this:

PEOPLE DON'T WANT A RURAL LIFESTYLE

"They come out of the techs and they've been in the city so they don't want to move to smaller towns and then the wages."

"There's a lot of skilled people from the East who won't relocate here."

COMPETITION FROM OTHER COMPANIES IN THE INDUSTRY

"We have had people move to Saskatoon for more money. We are the training ground for everyone else."

"We're far enough apart that it's not a big deal."

LACK OF TECHNICALLY SKILLED LABOUR

"There just aren't enough people out there that have proper training."

"I think in some areas there are definitely skilled people out there in the technical areas."

Table 12 Barriers to Recruiting Skilled Labour

Barriers	Average Rating	% Answering 4 or 5
Lack of technically skilled labour (n=41)	2.9	39%
Lack of labour with employability or life skills (n=39)	2.6	23%
People don't want a rural lifestyle (n=33)	3.2	[illegible]%
Competition from other companies in industry (n=40)	2.9	40%
Competition from other industries (n=41)	2.9	32%
Labour intensive nature of work (n=41)	2.8	29%
Cyclical nature of work in the industry n=(40)	2.3	23%

Other barriers which some employers strongly feel limit their ability to attract skilled labour include: competition from government, housing is unavailable, location, wages, taxes, and competition with union shops.

Companies were asked to rate a number of potential barriers to retaining skilled labour on a scale of 1 to 5 where 1 is strongly disagree and 5 is strongly agree. The following table shows the average rating and the percentage answering 4 or 5, as well as the number companies responding to the question (n). The biggest barriers to retaining skilled labour include: lack of employability or life skills, people don't want a rural lifestyle, and competition from other industries.

Some of their comments regarding these three issues include:

LACK OF EMPLOYABILITY OR LIFE SKILLS

"There are quite a few people who, if they could get their family life together, would be good employees but can't do it both at the same time."

PEOPLE DON'T WANT A RURAL LIFESTYLE

"They generally stay 2-3 years before they move and sometimes they just go back to school."

"They just aren't used to the no services paid."

COMPETITION FROM OTHER INDUSTRIES

"They are finding better paying jobs in other fields or centres."

"Locally it doesn't bother us but other businesses in Alberta are a problem because you don't have to pay taxes there and you can make more money."

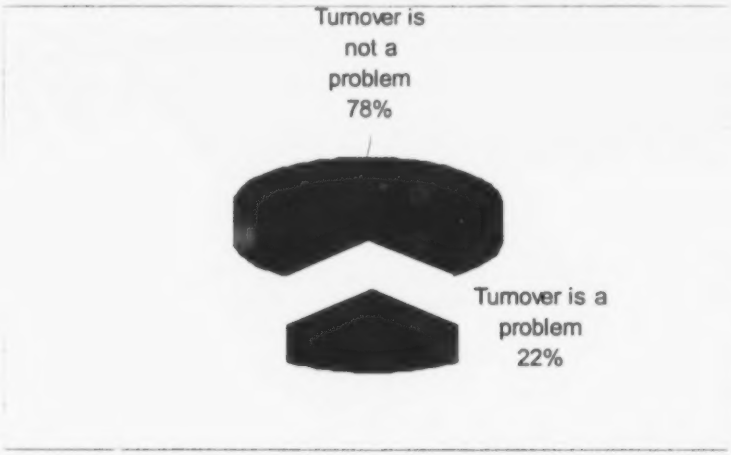
Table 13 Barriers to Retaining Skilled Labour

Factors	Average Rating	% Answering 4 or 5
Lack of technical skills (n=41)	2.0	15%
Lack of employability or life skills (n=39)	2.4	31%
People don't want a rural lifestyle (n=34)	2.6	29%
Competition from other companies in industry (n=41)	2.4	22%
Competition from other industries (n=41)	2.5	24%
Labour intensive nature of work (n=41)	2.4	20%
Cyclical nature of work in the industry (n=41)	2.2	17%
Racial tensions or cultural differences (n=41)	1.2	0%

Other barriers which employers strongly agree inhibit their ability to retain skilled labour was wages, repetitive nature of work, taxes, and unionized shops. The one point to note was the fact that wages was not identified as one of the primary factors as a barrier; it in fact was listed quite away down the list.

According to most companies surveyed (78%), turnover of employees is not a problem.

Figure 6 Turnover



Those who stated that turnover is a problem stated the following in terms of what they have done to address this issue:

"Nothing specifically, we just accept it." (2)

"Consider more benefits or a small increase in wages." (2)

"Hire people with higher levels of skills training."

"Before hiring, checking past work history and checking references."

"Before hiring we look at the candidate's stability."

"Promoting rural lifestyle."

"Promote teamwork."

"Benefits program."

"Regular employee reviews."

"Try to make better workplace conditions."

"Look for employees who are already qualified rather than spending time training."

Companies were also asked how their company plans to deal with issues such as changes in the demographics of our workforce in terms of: more women working outside the home, a shift from rural to urban in terms of population, and an increase in Aboriginal people of working age in the Province. Some companies are adopting a wait and see attitude or felt that these are not issues:

"Deal with it when it comes." (2)

"Don't know. I'm not familiar with it so I couldn't answer that one." (2)

"I'm not sure any of them are an issue in terms of retention and none of these are considerations in terms of recruitment."

"I don't think we really have a specific plan to address those changes."

Many felt that their current human resource practices address these issues:

"Don't anticipate having to change. Current policy is to hire the most qualified individual." (14)

"Doesn't apply. Don't have a problem." (8)

"All applications are open to anyone who applies. Currently 80% of the employees are women."

"Look at people on their own merit. Look at a person's character and ability to learn. We will work with them to get them up to our standards." (2)

Others have definite strategies to address these issues:

"We are already active in that area." (4)

"Look at contracting out more of the work."

"We had planned on targeting women in trades and encouraging that. Working more with the town to deal with the variety of housing alternatives to try and discourage the move to the cities.

"We have already dealt with it. We seek out skilled people regardless of sex or ethnic background. We provide additional training and don't put up with harassment of any sort."

"I don't know. A lot of the jobs here aren't really suited for women but if they want to apply we would use them. In terms of Natives we don't really see anything wrong in hiring or working with them. The move to urban is a problem because it is hard to keep the kids out here. I'm sure they are paying more here than what they would start at in the city. Maybe if there was more to do here it would help."

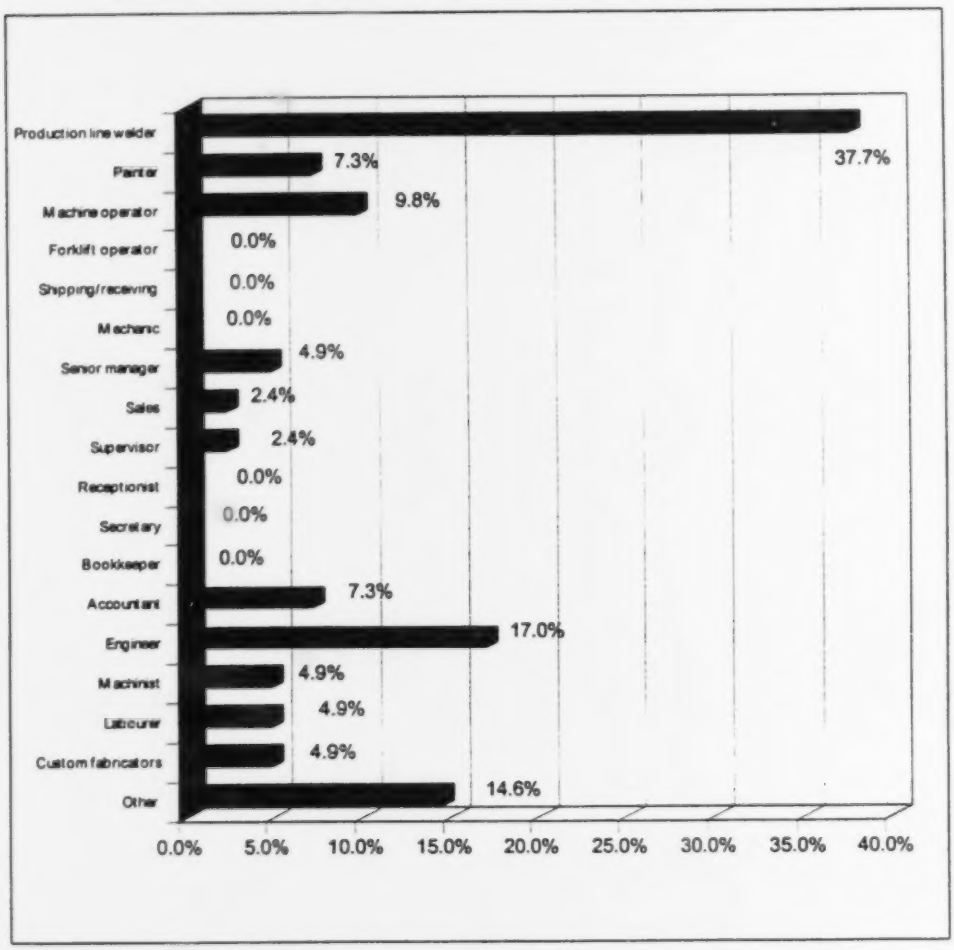
"We have targeted our strategies in this direction for women by trying to recruit from training institutions. We haven't targeted Aboriginals because there are no reserves in close proximity. We built a plant in Moose Jaw to deal with the move to urban. Now we have one in a rural area and one in an urban centre."

"We have a lot of ladies working for us. In terms of Aboriginals they don't want to move to rural Saskatchewan. We don't have a problem with hiring them if they apply."

Occupations for which manufacturers have difficulty recruiting include:

- Production line welders (37.7% of companies)
- Engineers (17% of companies)
- Machine operators (9.8%)
- Painters (7.3%)
- Accountants (7.3%)

Figure 7 Occupations For Which Companies Have Difficulty Recruiting



Other occupations included: drafting technicians, electricians, gas fitters, mechanical technologists, plumbers, and research and development.

4.7 GENERAL HUMAN RESOURCE ISSUES

Respondents were asked what they considered the most pressing human resource issues facing the industry in Saskatchewan. Clearly major issues include: the cyclical nature of the industry poses human resource challenges, lack of skilled welders and journeymen in the industry. Other issues include attracting people to rural areas, the industry, and to Saskatchewan in general.

Issues	Solutions
Cyclical nature of industry/layoffs (5)	Proactive HR dept Enlightened senior management Exporting Diversifying product lines
Welders (2)	More training at Kelsey and apprenticeships More training
Lack of journeymen in industry (2)	Allow training while working
Lack of services in rural Saskatchewan (2)	Government initiatives
Attracting people to smaller communities (2)	
Attracting people to industry (2)	Make more attractive Make them aware that hands-on jobs are good
Attracting people to Saskatchewan (2)	Good marketing Lower taxes
Finding skilled labour (2)	Training for production line work Funds for training from government Programs that are easy to use
Lack of young people willing to work (2)	
Young people leaving the farm	Train on the job
Developing quality training and a safe workplace	Industry should pool resources so small companies can take advantage
Management development and business training	Provide it
Labour is too specialized	Cross-training
Lack of Aboriginal people and women in workforce	Focus training on these groups
Keeping employees upgraded(2)	Keeping involved with PIMA and training providers Training on the job
Training inaccessible	Move company to bigger centre
Pre-employment course poor/taken to stay on EI	Make candidates continue with program
Need day-care in rural areas	
Human resources and training	Hire HR professionals

Some comments they made include:

"They are starting to take away a lot of the services such as health and highways which doesn't encourage people to move to rural Saskatchewan. We need initiatives from government to be committed to health, education, and highways."

"People take the pre-employment course at SIAST but they aren't qualified for anything. They just did it to stay on unemployment. Make them continue on with it. When they are done the course they should be qualified and not just oriented."

"I guess the biggest challenge is the big farm disappearing and the people who are leaving the farms don't really have the skills necessary. We need another option for these people other than going back to college for two years, as they still need to provide for their families. As an industry we take it upon ourselves to try and integrate them and train them on the job but it is hard work when they don't have the geometry skills."

"The boom and bust thing. It's not good for the industry to build up huge inventories and then lay a slew of people off."

"We've never had anyone come to us and say, 'I know how to do this. Hire me.' It's all regular people who come to us, not journeymen."

"A lot of our welders would like to become journeymen. A lot of them are MIG welders and they can't get certification if that is all they do so we lose a lot of our people because of that. We need some kind of transitional program to allow them to train while they are working here.'

"Quality training and safety. We hire our own training force and then training them in the system we need. Maybe we should all get together as an industry to pool our resources so that small companies can take advantage of it as well."

"It's not being able to hire people to come to this province when we are looking for professionals. Who wants to pay the taxes that we do here? Overall there is a perception that there isn't much to be offered to them here and that people leave Saskatchewan. They don't come to it. That's a big barrier. I guess it's just positive reinforcement of what we have to offer and the benefits to be found here. Just good marketing."

"The industry needs to be made somehow more attractive. We as an industry need to do more to identify ourselves to the general public."

"I sometimes wonder if the high-tech jobs, computer jobs, and office jobs are just more attractive to the young people today than the hands-on jobs are."

"The cyclical nature of the industry. We diversify our sales by exporting and by diversifying our product lines."

"There is pressure from other industries in terms of shortage of skilled labour such as welders."

5.0 Key Findings

5.1 COMPANY INFORMATION

- The most common business areas were tillage and seeding (24.3%), storage (19.5%), grain handling (17.1%), sprayers and application (14.6%), and truck boxes, trailers, transports, and accessories (12.2%).

- A peak production time for many (19) companies is Spring.

- 37% of companies surveyed are in urban communities (Saskatoon, Regina, Swift Current, or Yorkton).

5.2 WORKFORCE PROFILE

- Almost two-thirds of the workforce are between the ages of 16 and 34. In general, the workforce in the agriculture implement manufacturing industry is quite young compared to provincial averages.

- 16% of workers have a post-secondary certificate or diploma compared to a provincial average of 5%. In general, the industry has above average levels of education.

5.3 TRENDS

- Employment levels decreased 12% from 3,161 to 2,780 during the low production periods between 1997 and 1998. Companies however are anticipating growth for next year with employment expected to increase 25% from 2,780 to 3,468 during low production periods and increases of 4% during peak production times from 3,687 to 3,820.

- In general, companies expect to increase employment in all occupations, with the highest growth in terms of number of positions among welders, labourers, machine operators, front-line supervisors, painters, and sales.

- Some of the trends affecting companies in terms of training needs include:

  - Computer technology changes
  - Lack of qualified people
  - Skill shortages among specialized workers to hire i.e. welders and computer controlled equipment operators and painters
  - The loss of qualified workers going West i.e. welders, mechanical technologists
  - On job training due to rural location of business
  - Need to expand into other markets other than agriculture
  - Increased demand for quality

5.4 SKILL DEFICIENCIES AND NEW SKILLS

- Skill deficiencies and areas where new skills training is required among receptionists, secretaries, and book-keepers are generally computer training.

- The use of technology requires a need to continue to raise the awareness of how to use technology in the industry.

- Accountants also require computer training as well as training in using planning software.

- Supervisors require personnel management training, production training, and computer training in terms of inventory software and manufacturing control systems.

- Shippers need training on the computerized inventory system.

- Painters require training in using a variety of paint and equipment and will need training in quality and computers.

- Welders generally require skills upgrading and will require training in computerized machinery and systems and new equipment including robotics.

- Skill deficiencies among machine operators include reading drawings and advanced skills including computer controlled equipment

- Senior managers require computer training, personnel management, interpersonal skills training, and manufacturing planning training.

- Sales people require interpersonal skills training, as well as computer training.

5.5 TRAINING

- 83% (or 34 companies) provide training on-site to employees using their own company trainers or employees. Of those 34 companies the most common areas of training included job-focussed technical skills, safety, and computer training.

- 68% (or 28 companies) currently use training courses or programs provided by other training providers. The most common areas of external training included job-focussed technical skills (generally off-site), safety (both off and on-site), and computers (generally off-site). Companies rely on SIAST and regional colleges, as well as PIMA for training.

- Given the expected increase in Aboriginal people of working age in the province, 7% of companies anticipate using courses in cultural sensitivity or race relations, while 71% do not expect to use such training. 22% of companies stated they "don't know" whether they will implement such programs. Many felt that there are no problems in their workplaces. Companies felt that it depends on whether they employ Aboriginal people or not.

- "Value to business" and "timing of training" during the year emerged as key considerations to employers when making decisions about training.

- "Workplace training," "job coaching/mentoring (on-site training of company employees and/or supervisors)" and "combination of classroom and workplace training" are the preferred ways to train employees for technical skills. It is interesting to note that fewer companies were able to rate CD ROM/computer based training and Internet training largely due to respondents lack of experience/knowledge of this type of training

- The most necessary improvements to training include: trainers with industry experience, more input from industry, and more technical skills training.

- Almost one-quarter of companies felt that the current lengths of courses seemed appropriate. Of the respondents who suggested an appropriate time length for individual courses, the average was 35 days of training.

- Other areas for improvement to training mentioned include: offering courses in winter, making programs accessible to companies not located in major centres, centralized source for training information, skills upgrading for instructors, and the use of up to date equipment.

5.6 RECRUITMENT AND RETENTION

- According to most companies surveyed (78%), turnover of employees is not a problem. For those who stated that turnover is a problem they attempt to address it with better hiring practices such as hiring people with higher skill levels and checking references. They also use human resource policies including improving pay and benefits, and improving the work environment.

- In general people did not strongly agree there are barriers to recruiting employees. The most significant barriers to attracting skilled labour include: people don't want a rural lifestyle, competition from other companies in the industry, and lack of technically skilled labour.

- Other barriers which some employers strongly feel limit their ability to attract skilled labour include: competition from government, housing is unavailable, location, wages, taxes, competition with union shops.

- In general people did not strongly agree there are barriers to retaining employees. The biggest barriers to retaining skilled labour include: lack of employability or life skills, people don't want a rural lifestyle, and competition from other industries.

- Other barriers with which some employers strongly agree inhibit their ability to retain skilled labour wages, repetitive nature of work, taxes, and competition from unionized shops.

- Companies were also asked how their company plans to deal with issues such as changes in the demographics of our workforce in terms of: more women working outside the home, a shift from rural to urban in terms of population, and an increase in Aboriginal people of working age in the Province.

  - 6 companies are adopting a wait and see attitude or felt that these are not issues while
  - 25 felt that their current human resource practices address these issues, but
  - 10 have definite strategies to address these issues, such as targeting women in recruiting (2), contracting out work (1), and addressing housing (1).

- Occupations for which manufacturers have difficulty recruiting include: production line welders (37.7% of companies); engineers (17% of companies); machine operators (9.8%); painters (7.3%); and accountants (7.3%).

5.7 GENERAL HUMAN RESOURCE ISSUES

- Major human resource issues facing the industry according to companies include: the cyclical nature of the industry poses human resource challenges, lack of skilled welders and journeymen in the industry. Other issues include attracting people to rural areas, the industry, and to Saskatchewan in general.

6.0 Training Curriculum

The objective of this phase of the project was to:

- Identify any gaps in training offered compared to training needs in the industry.
- Identify courses/ programs required for each area.
- Make curriculum recommendations.
- Identify processes for certification.

The following sections present the results for each of these four steps.

6.1 TRAINING GAPS

Table 14 shows the training required in terms of skill deficiencies and new skills (not company specific skills) that will be required for key occupations in the industry. In addition, the table shows if training is currently available for this skill area.

Table 14: Training Needs

Occupation	Skill	Available Training for This Skill
Production Line Welders	MIG welding	SIAST Wascana; SIAST Kelsey; SIAST Palliser; SIAST Woodland; Prairie West Regional College; North West Regional College; Cypress Hills Regional College; Parkland Regional College; Cumberland regional College
	Read blueprints	SIAST Kelsey
	Computers/robotics	None
	Certification of production line welders	PIMA/Carlton Trail REDA; SIAST Palliser; SIAST Woodland
Welder	Journeyman	SIAST Palliser
	Basic production/fabrication	SIAST Wascana
Painters	Quality	SIAST Kelsey Auto Spray Painting (Automotive only)
	Use of different paint	
	Use of different equipment	
	Equipment maintenance	
	Computerized machinery	
Machine Operators	Read blueprints	SIAST Kelsey
	Computerized machinery	SIAST Kelsey
	Fabrication	SIAST Wascana
Senior Managers	Computers	Heinz Institute; Saskatoon Business College; CDI College; Academy of Learning; SIAST; Regional Colleges
	Communication	SIAST; U of S Extension; U of R Extension
	Human resources mgt.	SIAST; U of S ; U of R

Sales	Computers	Heinz Institute; Saskatoon Business College; CDI College; Academy of Learning; SIAST; Regional Colleges
	Interpersonal skills	SIAST; U of S Extension; U of R Extension
Front-line Supervisors	Supervision skills	SIAST; U of S Extension; U of R Extension; PIMA; Seminars
	Interpersonal skills	SIAST; U of S Extension; U of R Extension
Receptionist	Computers/Internet	Heinz Institute; Saskatoon Business College; CDI College; Academy of Learning; SIAST; Regional Colleges
	Interpersonal skills	Heinz Institute; Saskatoon Business College; CDI College; Academy of Learning; SIAST
Secretary	Computers/Internet	Heinz Institute; Saskatoon Business College; CDI College; Academy of Learning; SIAST; Regional Colleges
Book-keeper	Computers/Internet	Heinz Institute; Saskatoon Business College; CDI College; Academy of Learning; SIAST; Regional Colleges
Accountant	Computers	Heinz Institute; Saskatoon Business College; CDI College; Academy of Learning; SIAST; Regional Colleges; SIIT
	Interpersonal skills	SIAST; U of S Extension; U of R Extension

6.2 GAP ANALYSIS

As a result of identifying any gaps in training that is presently offered as compared to the training needs that were identified by industry during the research and validation steps of the project, the following items are of note:

- On the whole, with a few exceptions, the skill deficiencies and new skills required for those occupations working in the industry can be addressed through existing program and courses.
- Computer training and computerized equipment training are becoming a much more important component in the workplace. As more and more new technological devices become commonplace in the shops, incorporation of workplace training on this equipment will be required. The industry and PIMA will need to cooperatively monitor this and make the necessary changes.
- In-house trainer training will need to be expanded in order for companies to be better prepared in delivering workplace training.
- Specific workplace training unique to individual companies will become even more prevalent than it is today.
- There is a gap in the amount of human resources planning that is undertaken by individual companies in the industry.
- The need for cultural diversity training and understanding will become greater in the coming years, as the profile of Saskatchewan's workforce changes. Preparation needs to begin very soon.
- Although the research found there is already training available through various vendor specific products, the gap analysis pointed out the need for a more generic off-the-shelf training program with courses developed in the following areas:
  - Industrial Application;
  - Powder Coating; and
  - Rotational Molder

6.3 CURRICULUM RECOMMENDATIONS

This component of the project was to focus on developing or identifying courses outlines or those shell areas the Steering Committee identified as priority. The research and findings through the validation process indicated that a need for industrial paint application, powder coating and rotational molder training were necessary. Even though training is available, it is somewhat vendor specific and not developed into modules that could be delivered either by an outside provider or internally by the company themselves.

Various Steering Committee members provided course outlines for those programs identified and suggested they be listed in their present format, with the understanding that further development will be required, in which more detail and content will be incorporated into each specific module developed.

6.3.1 Industrial Application

The present Level One, Two and Three Training Programs that has been developed by Carlton Trail Regional College be adopted as the base of which to further develop a modularized program for industrial painting

The Training Profile for all levels of this program includes:

1. Orientation to Industrial Coatings Applicators
   - Course orientation
   - Responsible of an Applicator
   - Definition of Industry Roles
   - Public Relation and Ethics

2. Recognition and Evaluation of Corrosion
   - Introduction to Corrosion
   - Advanced Corrosion

3. Evaluation of Coatings and Linings
   - Examination of the Roles of Coatings and Linings
   - Identification of the Types of Coatings and Linings
   - Differentiating Between Solvents
   - Comparison of Curing Methods
   - Safe Handling and Storage
   - Preparation of Coatings (shop module)

4. Interpretation of Contracts, Specifications and Legislation
   - Identification of Initial Conditions
   - Comparison of Codes, Standards, Specifications and Procedures
   - Description of Contracts
   - Identification of Legal Responsibilities
   - Preparation of a Painting Contract Specification
   - Types of Adhesion

5. Selection and Use of Surface Preparation Methods
   - Identification of Methods of Surface Preparation
   - Surface Preparation Standards
   - Identification and Selection of Materials and Equipment for Solvent Cleaning
   - Identification and Selection of Materials and Equipment for Hand-Tool Cleaning
   - Identification and Selection of Materials and Equipment for Mechanical Cleaning
   - Identification and Selection of Materials and Equipment for Abrasive Cleaning
   - Preparation of Substrates Using Solvent (shop module)
   - Preparation of Substrates Using Hand Tools (shop module)
   - Preparation of Substrates Using Mechanical Tools (shop module)
   - Preparation of Substrates Using Abrasive Methods (shop module)
   - Visual Aids for Surface Preparation

6. Selection and Use of Application Methods
   - Interpretation of Technical Data Sheets
   - Identify Methods of Application
   - Selection and Application of Material Using Brush and Roller
   - Selection and Application Using Conventional Spray
   - Appendix: Recognizing Possible Spray Problems
   - Selection and Application Using Airless Spray
   - Appendix: Start-Up and Shut-Down Procedures – Airless Spray Equipment
   - Selection and Application Using Air-Assisted Spray
   - Selection and Application Using Electrostatic Spray
   - Selection and Application Using Powder Spray
   - Selection and Application of Material Using Plural-Component Spray
   - Brush and Roller Application (shop module)
   - Conventional Spray Application (shop module)
   - Airless Spray Application (shop module)
   - Air-Assisted Spray Application (shop module)
   - Electrostatic Spray Application (shop module)
   - Powder Spray Application (shop module)
   - Plural Component Spray Application (shop module)
   - Operation of a Compressor (shop module)
   - Paint Defects

7. Description and Performance of Quality Assurance
   - Review of the Basic Concepts of Quality
   - Description of a Quality Assurance Program
   - Introduction to Basic Paint Testing Equipment
   - Use of Basic Paint Testing Equipment
   - Appraisal of Advanced Testing Procedures and Equipment
   - Evaluation of Forms of Reporting

8. Recognition of Safety and Environmental Obligations
   - Review of Workplace Hazardous Materials Information System (WHMIS)
   - Review of Occupational Health & Safety Regulations
   - Identification of Procedures of Handling Hazardous Materials
   - Safety in Painting Operations
   - Appendix: Health & Safety
   - Personal Safety Equipment
   - Description of Scaffold Systems and Rigging
   - Erection of Selected Scaffold Systems
   - Identification of International Colors Used for Safety
   - Identification of Legal and Moral Obligations

9. Math Modules
   - Wet and Dry Film Thickness Calculations
   - Formulas Dealing with Areas
   - Calculation of the Amounts of Coatings
   - Estimating Amounts of Material

6.3.2 Powder Coating Applicator

Research and input from industry indicated the movement toward more powder coating applications occurring in the workplace. The Steering Committee indicated a module or course should be included as an option to a company when the industrial painting program is being delivered.

The outline of the module proposed was again derived from a vendor specific training session and requires further development. The outline proposed is as follows:

1. Evaluate Coatings and Linings:
   - Examine the Role of Coatings and Linings
   - Describe Safe Storage and Handling of Materials
   - Prepare Materials for Application
   - Identify Curing Methods
   - Differentiate Solvents

2. Select and Employ Surface Preparation Methods:
   - Identify Initial Conditions
   - Identify Methods of Surface Preparation and Inspection
   - Prepare Substrate Using Solvents
   - Identify and Select Equipment Used for Hand Tool Cleaning
   - Identify and Select Equipment Used for Mechanical Cleaning
   - Prepare Substrate Using Hand Tools
   - Prepare Substrate Using Power Tools

3. Select and Employ Application Methods:
   - Interpret Technical Data Sheets
   - Identify Methods of Application
   - Select and Apply Materials Using Conventional Spray
   - Select and Apply Materials Using Airless Spray

4. Recognize Safe and Environmental Obligations
   - Review Occupational Health and Safety Regulations
   - Identify Procedures in Handling Hazardous Materials

6.3.3 Rotational Molder Training

Plastics has become more frequently a part of the agricultural machinery manufacturing and thus the need for rotational molding training was identified through the research and in discussions with the industry during the validation process. The Steering Committee members recommended that research be undertaking though the Association of Rotational Molders. The findings indicated that the Association (ARM) has adapted a successful training and performance assessment that originally had been developed by a member company of ARM. The company (T&D Rotomolding)[1] had agreed to enable ARM to permit member companies to reproduce the training program titled "Effective Leadership: Training, Teach and Inspire" to use as a bases for developing individual training and development programs.

The following outline was incorporated into this report and is the broad outline for developing a program or course specific for the Saskatchewan industry.

1. Methods to determine current skill levels identify deficiencies, training methods, and training required for a variety of occupations from maintenance personnel, process/machine operators, and supervisors.

[1] Association of Rotational Molders, "Effective Leadership: Train, Tech, and Inspire," September, 1996.

2. Basic competencies required to prepare, start-up, and shut-down a rotational molding machine in a production environment:

   - Prepare for production start-up
   - Change production mold
   - Start-up production drive and optimize processing conditions
   - Shut-down production process
   - Identify weight, dimensional, and visual defects to maintain product quality
   - Establish and maintain effective working relationships

3. Documentation about the basic process involved in rotational molding.

4. Basic competencies required to take over, run, and monitor a rotational molding machine in a production environment
   - Adopt working practices to comply with general health and safety requirements
   - Prepare to run and monitor the production process
   - Run and monitor the production process
   - Identify visual defects to maintain product quality
   - Handle and pack production components
   - Hand over production

6.3.4 Recommendation

As a result of the research and the work of the Steering Committee to gather the program and course outlines, PIMA needs to continue the partnership and work with SIAST and/or the regional colleges, particularly Carlton Trail Regional College, to develop the appropriate content for each of the modules identified and to work out with SIAST the appropriate certification that will meet the need of PIMA and the industry.

6.4 IDENTIFY PROCESSES FOR CERTIFICATION

The process for SIAST certification of a training program would involve the following steps.

To obtain an applied certificate through SIAST, a student needs to take a minimum six weeks or 180 hours of training. Given that the Industrial Paint Applicators Course outlined is one week (40 hours) long, this would count for 2 credits. Students would require an additional 4 credits. This could be fulfilled by a combination of practicum (practical experience supervised by non-SIAST staff) or work experience (See *Criteria for SIAST Completion Credentials* below). SIAST and the Sector Partnership should determine the best approach to attain certification through course development and delivery.

Further examination should be given to the possibility that credit could be given for the knowledge these employees have coming into the upgrading program. By recognizing their existing knowledge, current employees might also be eligible for an applied certificate (prior learning assessment recognition).

By introducing an applied certificate program in industrial painting, the industry's biggest area of need will be addressed. This training program could also be used by other industries in addition to agricultural implement manufacturers.

Criteria for SIAST Completion Credentials:

Criteria	Applied Certificate
Minimum length	6 weeks
Pre-requisites	program specific
Minimum credit units*	6
Advisory committee required	no
Evaluation of student	yes
Program review	no

* Credit units are converted from training hours based on the following formula:

1 credit = 15 hours theory

1 credit = 30 hours of practicum (practical experience supervised by non- SIAST staff)

1 credit = 25 hours if theory and practical are integrated (such as shop/lab/clinical/CBE led by SIAST instructor)

1 credit = 200 hours of work experience

7.0 Industry Validation

To ensure industry input was sought throughout the whole process and not just from the telephone interviews portion, the findings of the research and the resultant recommendations developed by the Steering Committee were further validated. The validation process focus groups with two employer group and two employee groups.

The representation of the two employer groups included both large and small companies, i.e. more than 25 and less than 25 employees, there was both rural and urban employees and they came from a variety of different manufacturing product lines. The sessions were held with one in Saskatoon and one in Regina. At these sessions, those employers present were asked if they would consent to having their employees participate in a similar session.

The results of the request lead to two employers, both from the Regina area allowing their employees to participate in a discussion group on site. Each session included a good cross section of the occupations employed at each work site, which included welders, production labourers, supervisory (floor), industrial painters and engineering. There was one female employee who participated from one of the work sites.

The following is a summary of the discussions held with each group and each location is also separated:

7.1 REGINA AND AREA FOCUS GROUPS

Young and Mobile Workforce

Courses in employability skills training may not be necessary but employers felt that these skills could be taught though employers providing new employees with some orientation or a handbook. They felt these skills should be taught in secondary or post-secondary school as a life skills course. Employers recognize that supervisors have to be skilled in coaching people and providing constructive criticism.

Increasing Employment

Companies are not expecting a lot of growth in terms of employment for welders, labourers, machine operators, supervisors, painters and sales. They expect there to be increased need for mechanics. There may be need for painting training on an as needed basis, as well as training in powder coating. Such training could be offered through PIMA and should be delivered on the shop floor.

Training Issues

Employers agree that training is important but sending employees out to training programs is costly, and they would like more funding for training. Alternative forms of training delivery may not work in their industry and they feel hands-on training is best. For example, supervisors can deliver training on-the-job by following outlines and testing employees. They would like to see a tax credit as a potential incentive to train. They agree there is a need to develop better ways of recruiting more Aboriginals. They feel there is some racism in companies.

PIMA should play a central role in providing information about training programs and funding; however, it is important that the information they provide is sent to the "right person" in each company.

Recruitment and Retention

Turnover may be a problem in terms of unskilled labour as many either leave to work in other companies for a higher wage or they return to school. For those unskilled labourers, employers suggested the industry have a form of accreditation process to allow employees some transferability of skills.

They feel rural employers should recruit young people in the secondary schools to keep people in the community. They felt that it might be difficult to attract people from the cities to rural communities because "either a person wants to live in that environment or they don't." Employers may have to pay employees more to keep them in smaller communities; however, they should expect productivity for those wages. PIMA should promote the industry in Saskatchewan. One of the challenges of promoting the industry and our Province is that our economy is highly dependent on agriculture. They agree there is a shortage of skilled trades people in Saskatchewan and the provincial government should promote the trades. For targeted recruitment of Aboriginal people and women, companies must be convinced there is an impact on profitability and senior management must share that perspective. In terms of cooperative education, they felt that only large companies would be able to absorb the costs and have short-term projects for the student to work on. They prefer the apprenticeship program and pre-employment programs, as they would not want employees working that don't have the training or skills.

Cyclical Nature of Industry

Research on addressing the cyclical nature of the industry is not necessary as many companies are investigating ways to address this through diversifying their product line. They felt the market should "sort itself out" and government should not influence it.

Attracting and Retaining Labour in Saskatchewan

They would like to see PIMA continue its role in lobbying the provincial government on behalf on the industry.

Sector Partnership

They feel companies should continue to work together in addressing training and human resource issues: "I think there's a number of things that we should be doing to work together to become stronger as an industry. That will make everyone better because even though we compete against each other, our competitors get better. That reinforces us to get better or get out."

They agree information about training and funding is valuable and it needs to be provided to industry. It is also important that any information provided gets to the "right person" in the company. An annual conference on human resource issues is not necessary as PIMA addresses these issues with seminars in their annual conference. It is important that someone outside the industry presents the information, as companies are not willing to share their HR strategies with competitors.

7.2 SASKATOON AND AREA FOCUS GROUPS

Young and Mobile Workforce

The employers who attended from the rural areas agree they have a problem with young, mobile labour moving to larger companies and to the cities. As a result this is making rural companies apprehensive about investing in training. They also feel younger workers may lack accountability and they may lack a good work ethic. In the past, this industry relied on the farm work force to work for the company in the winter months, however, the industry has evolved over the past 40 years to where year round operations are normal. Thus, the reliance on use of farm labour compounded with the reduction in the rural population base has changed the focus. They would like to see the government assist companies in hiring new recruits to defray the costs of training. The urban employers who attended the focus group session indicated they have not experienced the same problems with their workforce, however, they sympathized with their rural

Increasing Employment

SIAST and industry have successfully worked together in the past to develop fabricator courses and production line welding. They recommend changes to the fabricator course in terms of making it longer and SIAST should offer an apprenticeship program in fabrication. Painting training could be offered on an as needed basis to current employees as companies generally train painters from within. They feel the training program should include training on equipment selection.

Training Issues

Companies agree training should be delivered on the shop floor mainly because equipment varies depending on the company. More information on training and funding is required by industry and should be provided in the form of a pamphlet, mail-out, or on a web site. They trust PIMA and would like the information to come from them. Employers also felt that funding programs and the process of application is too complicated; the amount of time required to apply is not worth the funding. They like the idea of tax credits being given to companies to make it easier for them to provide training. Training in cultural diversity and Aboriginal issues may not be required at present but employers felt there will be a need in the future as more Aboriginal people enter the workforce.

Recruiting and Retention

Turnover is manageable for companies but they feel that smaller, rural companies are "training grounds" for larger companies in the cities. They feel being in a rural community makes it difficult to attract and retain labour, particularly welders. Retaining labour is less of a problem than it may have been during the time of the survey as oil production has slowed in Alberta and

mining companies have made lay-offs. In terms of adapting HR programs to attract women and Aboriginal people, companies don't see any need to change their current hiring practices and diversifying their work force does not seem to be a priority to them.

Cyclical Nature of Industry
To address the cyclical nature of the industry, employers feel that companies are already doing so through diversifying their product lines or looking to export markets. The major issue is the dependence on the price of grain.

Attracting and Retaining Labour in Saskatchewan
The issue of keeping skilled labour in Saskatchewan should be addressed by industry lobbying the government.

Sector Partnership
Employers agree that industry should work together to address training and human resource issues. Information on labour markets, training and funding has to be practical in order to be useful. An annual meeting on training and human resources is not necessary, but there needs to be commitment from industry to address these issues.

7.3 EMPLOYEES GROUP #1

Training Issues
The education system, employers, and employees all have a role to play in ensuring employees have employability skills. The employer should ensure employees are able to handle new tasks and the employee has to want to be successful. Employers should offer employability skills training. The more skills training and employee has, the more productive the employee is. This also improves the working relationship they have with their employer.

Employees would take more training if it were available and they would like to see training in:

- actual uses of the equipment
- production line welding
- machine trouble shooting courses
- WCB welding

They feel their employers may benefit from more safety courses, CPR/First Aid, supervising skills training, and Occupational Health and Safety. Training that benefits the company should be paid for by the company and the employee should pay for part of training from which they benefit personally, like First Aid.

Employees pursued a trade to enhance their career and "do something different." The company also facilitated their training. They feel the more training a person has the more they can do and the more valuable the employee.

Training is best provided on the job and must be tailored to meet employee learning styles. It can be offered during the work day or after hours. External training is another option.

Diversity Issues
Employees suggested that representatives from the company go to Aboriginal groups to discuss the requirements of jobs and how to get a job in the industry. Companies could take or set-up training for women in the workplace. They feel that there is a lot of misunderstanding surrounding employment equity issues and the government should better explain the purpose and processes. They suggested the industry have open houses to encourage people to learn about their industry.

Recruiting and Retention
To encourage youth to enter the industry, employees feel companies should offer better pay. They suggested better communication between industry and schools in terms of tours, employees speaking at schools, job shadowing, and work experience. Youth may be interested in entering the industry, related training, or a trade if there was promise of a well-paying job.

Skilled workers are leaving the Province for better pay and better jobs. They stay mostly because of family. They may not want to "start at the bottom" again in another job, in another Province. People move from company to company in the industry in Saskatchewan to upgrade their skills and resume. They seek stability, and good relationships with co-workers, as well as the opportunity to advance, in addition to good wages.

Sector Partnership
Employees would like information about training and career information. They would like to know what training programs are available and how to enrol. This information could be publicized by the company on bulletin boards, put in pay envelopes, or discussed at staff meetings. SIAST could also send out calendars.

7.4 EMPLOYEES GROUP #2

Training Issues
Respondents believe it is the combined responsibility of the education system and the employee to ensure employees are not lacking employability skills. It has been found that new employees take a certain length of time before they know the real world of work. The education system is partly to blame for this. Their education sometimes is not related to what they will do on the job or shop floor. Involving students in co-op programs, apprenticeships and job sharing can decrease this gap. An employer should have an orientation program, in which the new employee can practice the skill. In addition, the employer needs to understand learning on the job takes time.

Employers will look for employees with the necessary employability skills during the recruiting process. However, employers need to be involved when there are specific issues or skills found to be lacking. These skill shortages also need to be communicated to the staff in the office, so that appropriate action may be taken.

Employees are willing to take more training if it was made available to them. This includes on the job training by other employees who already possess these skills. Additional training would keep their skills current and up to date with ever-changing technology and techniques such as painting or welding. Offering courses on reading blue prints and drawings would decrease employee error. Employees also look to additional training as a back up to their current occupation. This would give the employee an opportunity to work using different skills, if they were injured in there present occupation. They would like skills updating in new technologies and techniques, such as seminars in CNC lathes.

Cross training is useful when covering staff due to employee absence due to vacation days and sick leave. Training also decreases the impact of employee turnover, by allowing internal replacement by employees with similar skills. Training can be a useful tool when developing a human resource plan, and can provide an opportunity for the employee to grow within the company, by learning skills that are of interest.

Respondents believe the employer or employee, depending on who benefits should shoulder the cost of training. The government needs to assist those people who need training to gain employment. Tax dollars need to recognize training.

Employees entered the trades out of necessity for a job, their family wishes, interest, and they preferred working instead of attending high school.

Education should be provided in the home, at school, and by employers. They feel that the best place to learn is on the job. One option is to allow workers to train at other companies to expose them to other ways of working.

Diversity Issues

The respondents stated the Aboriginal people should be provided with the appropriate education and training necessary to allow them to enter the workforce. Aboriginal people should expect to compete for jobs and advancement the same as non-Aboriginal people. The respondents also stated women are welcome in the workplace and employees believe there are a number of programs and support networks to promote women in trades and technology. There is a need for diversity training as some discrimination does exist. There should be training about different customs and beliefs. Companies must start to address diversity issues by discussing it and looking to other companies who have successfully addressed these issues

Recruiting and Retention

To encourage youth to enter the trades, industry should promote the trades and the opportunities of a career in the trades, including pay. Many high school guidance counsellors need to learn more about opportunities in the trades. Industry should offer tours for schools and work placements for students.

Money motivates people to leave the Province, in terms of higher wages and lower personal taxes. Employees also want security in their job. The employees feel that some people think,

"the grass is always greener on the other side." They believe there are some people who have left the Province and are doing well, but there are some that came back.
People may leave to work for other companies in the industry in Saskatchewan for better wages and for job security. They also feel that their workplace is secure and that their employers are working to make things better. They have good relations with managers and think their workplace is fun, has good morale, and a good, cooperative atmosphere.

Sector Partnership
Employees would like to receive information about training and career information to keep their skills up to date and for self-improvement.

7.5 EMPLOYEES GROUP #3

Training Issues
One of the disadvantages of computer based training is that it is not "hands-on." People still need to interact with a trainer. Training is a priority in their company through training programs delivered in the workplace as well as the company supporting employees financially to take external training. They feel training is necessary to keep the company competitive but one problem is that technology is always changing. Employers want to ensure that if they are investing in training they are training employees who will stay in the long-run. In general they feel that it is employees on the production line that must be kept current and that training, if done effectively, can improve productivity and the bottom line. Being up to date in training lets employees feel confident about their abilities.

Diversity Issues
Employees felt the Aboriginal community must educate their young people and at the same time, encourage them to seek work in the industry to develop their careers.

Recruitment and Retention
Youth must be encouraged to stay in school. They suggested companies speak at career days. Students should be made aware of the opportunities in agriculture and related industries. One factor in retaining employees is what the community can offer. Employees need to be satisfied and companies need to make work attractive.

Sector Partnership
Employees would like to know more about the types of training offered. They feel the Sector Partnership should involve employees and management should support a bottom-up approach.

8.0 Recommendations

The following recommendations are based on the results of the research and developed in consultation with the Steering Committee.

8.1 TRAINING NEEDS

Companies in the industry generally support on-going training of their employees, mainly in job-specific skills, safety, and computers. Training accessibility is an issue and most companies prefer on-site and on-the-job training, and many use their own employees to deliver the training. Other improvements needed include having up to date equipment at training institutions and instructors with relevant industry experience. Research showed many employers are not aware of available training programs and funding sources; more effective communication is required.

Companies in the industry expect to see a growth in the number of people employed, especially among welders, labourers, machine operators, front-line supervisors, painters, and sales. Overall, companies reported few skill deficiencies and most of the skill areas focus on computer training and using new techniques and equipment.

Timing of training courses offered at training institutions emerged as an important factor as to whether or not companies decide to send employees.

Companies in general see the need for cultural diversity training as depending upon whether Aboriginal people are employed in their company. Many felt that they currently have no strong need for such training as they have no problems or few Aboriginal employees. However, this will be a factor that needs to be dealt with in the very near future.

Recommendation: It is critical that PIMA and the industry continue and nurture the partnership with training institutions and providers and work to ensure there are adequate training spaces, programs and courses for employees entering employment and for existing employees. Where training does not exist, industry and training institutions must work together to develop these training programs.

- Strategy: In order to better plan training for the industry, companies must endeavour to use more human resource planning practices in terms of anticipating employment. Better planning would allow industry to continue to work with training providers to ensue there are enough graduates in related programs to meet their needs. PIMA must work with its members to develop this capability.

- Strategy: The database of available training programs must be kept current and available through PIMA to members.

- Strategy: PIMA should complete detailed job analyses for the various occupations in the industry. This information could be provided to SIAST and other training providers to

determine if there are already training programs that exist or if programs need to be developed or brokered through another training institutions.

- Strategy: The research and gap analysis undertaken in this project identified the need for more formal industrial paint application training, thus building on these findings, a formal training program in industrial paint application should be developed and delivered on an as-needed basis, and co-ordinated through PIMA. This could be delivered either in-house using company staff as trainers or through an outside facilitator provided by PIMA, SIAST, other training providers, or through the regional economic development authorities.

  Additional development would need to be done at this time to bring the curriculum up to a state where all the courses/modules in the program can actually be delivered.

  This course should include modules in: orientation to industrial coatings applicators; interpretation of contracts, specifications, and legislation; selection and use of surface preparation methods; selection and use of application methods; recognition of safety and environmental obligations; math modules; use of equipment; quality; and powder coating. In addition, modules on WHMIS and Occupational Health and Safety may be included as prerequisite or follow-up training.

- Strategy: Additional courses currently available through other related industry associations should be investigated and offered by PIMA, such as the training program and performance assessment plan developed by the Association of Rotational Molders. This program includes:
  - Methods to determine current skill levels, identify deficiencies, training methods, and training required for a variety of occupations, from maintenance personnel to process/machine operators and supervisors.
  - Basic competencies required to prepare, start-up, and shut-down a rotational molding machine in a production environment
  - Documentation about the basic process involved in rotational molding.
  - Basic competencies required to take over, run, and monitor a rotational molding machine in a production environment

Recommendation: Industry should work with training providers and government to ensure information about training programs and funding is easily accessible to companies and maintained in a database.

- Strategy: Information on training programs and funding should be readily accessible to all industry members in the form of a centralized information source and regular promotion. PIMA serves a critical role in researching, housing, and distributing information to members about training programs and funding in a database.

  A database of all relevant training available for PIMA members was researched and developed through this sector partnership. PIMA will serve as a central contact for providing

this information to members about training and funding programs. This information will be made available on paper and electronically in a database form, and made available through the Internet.

- Strategy: Tax credits and initiatives for companies offering training should be researched by PIMA to enable small and medium sized companies access to provincial training incentives.

Recommendation: Industry should continue to focus on developing and delivering in-house training programs. Training programs that can be delivered on-site address the issue of training accessibility. Encouraging internal training would address the need for trainers with industry experience and using up to date equipment as companies would be offering training using their own employees on their own shop floor.

- Strategy: Companies should implement training programs during slow periods to help with employee retention.

- Strategy: PIMA should partner with SIAST and other trainers to investigate and consider options for offering train the trainer programs for companies providing their own internal training. The existing workplace (OJT) training program offered by SIAST Woodland Campus needs to be studied to determine relativity and appropriateness for adaptation to PIMA's needs.

- Strategy: Training should be more formalized by providing accreditation through the most appropriate agency. PIMA could serve as a certification body for companies' internal training programs by providing checklists of required skills for different jobs. These checklists should be developed by PIMA, industry, and training providers. The checklists could be used as a basis to provide structure to on-the-job training currently being provided by industry. In addition, training would be considered as certified by PIMA providing employees with recognition. These checklists could be used as a basis to determine whether the training can be accredited by SIAST.

- Strategy: PIMA must contact all the training providers identified or mentioned in this project to ensure their name and a contact is on the Association's mailing list so they can receive vital information about needs identified and to open the lines of communication even more.

Recommendation: The process of identifying aboriginal issues has been started through this project and although there has been no issues identified at this time, PIMA and members are aware there are potential for issues in the industry in the future and they will need to be vigilant and prepared to respond when necessary.

- Strategy: PIMA will work with training providers to gather information about training courses or seminars on cultural diversity and Aboriginal issues. Information should be provided to members and distributed through their newsletter.

- Strategy: PIMA will need to meet with and develop partnerships to exchange information with Aboriginal groups and agencies.

- Strategy: First Nations and Métis leaders must emphasize the importance of employability skills to Aboriginal peoples by incorporating courses on these topics within their training programs.

- Strategy: Industry and Aboriginal organizations and training institutions, such as the Dumont Technical Institute and the Saskatchewan Indian Institute of Technology, must work together to address training and human resource issues and ensure that their training programs meet industry needs. This can be achieved through on-going and open dialogue between PIMA and Aboriginal organizations.

8.2 RECRUITING AND RETENTION

Some companies have difficulty recruiting because of rural location (housing) and competition from other companies in industry, as well as there being a lack of skilled people available. One issue of concern to this industry is that young people may not be attracted to the industry and prefer working in an office or similar environment as opposed to outdoors or on a shop floor.

Companies with retention problems cited poor employability skills, their rural location, and competition from other industries (money and location). Most just accept turnover as part of doing business and address it through recruitment or by offering better pay, benefits, and trying to improve the work environment. Companies are having difficulty in recruiting skilled welders, journey persons in some of the other trades (especially maintenance), engineers, machine operators, painters, and accountants.

Anticipated changes in the Saskatchewan labour market such as more women working, more Aboriginal people entering the workforce and a rural to urban shift are issues for companies that can be overcome. They feel that their hiring policy of selecting the best person for the job addresses these challenges.

Companies expressed their difficulties in attracting and keeping skilled labour in Saskatchewan, especially rural Saskatchewan, when many skilled, young people are moving away. Many employers cited the high personal income tax and sales tax as being a major issue.

Younger and new employees may be lacking employability skills. Another related challenge is that they are highly mobile and they may be unwilling to stay in the Province when they can go elsewhere for more money. Some may not be attracted to life in a rural community. This, combined with the cyclical nature of the industry, leads to challenges in retaining a skilled workforce.

Recommendation: Courses or support in employability skills training should be offered to current employees, as well as using better recruiting practices.

- Strategy: Employees must be made aware of the importance of employability skills in the workplace.

- Strategy: PIMA should develop an outline of employability skills as well as practical guidelines for employers to use when recruiting and selecting employees to ensure those they hire do have the skills needed to be successful at work.

- Strategy: SIAST and other training providers should ensure life skills or employability skills component be included in technical skills training.

- Strategy: PIMA will work with industry to develop a generic orientation checklist that would assist members in the orientation task. The orientation should be provided to new employees and be included in an employee handbook. Companies need to explore the use of mentoring more formally in the workplace.

Recommendation: Companies need to be more proactive in competing for labour in Saskatchewan. This includes anticipating changes in terms of demographics and adapting recruitment policies to fit the situations. Industry must also look for ways to encourage retention of employees.

- Strategy: PIMA should promote the industry overall through a public relations campaign to generate overall awareness of the industry.

- Strategy: PIMA must promote the industry to the high schools and youth by making career information readily available to high school guidance counsellors and through involvement with the schools at career fairs. The industry should be promoted as highly technical and advanced.

- Strategy: PIMA should work with training institutions to offer co-operative education, work experience practicums or summer employment in those occupations for which they have difficulty recruiting address their needs as well as attract young people into the industry.

- Strategy: Recruitment needs to be more focused on attracting Aboriginal people and women in the workforce.

- Strategy: There needs to be innovative approaches to promote living and working in rural communities. We should learn from the successes of companies who have achieved this. These companies could serve as role models for other companies facing this challenge. PIMA could profile their successes in the newsletter and during their annual conference or when members visit a work site.

- Strategy: When recruiting, companies should advertise the benefits of living and working in their community. This way they will attract individuals to the community that would be

interested and informed about the merits of this lifestyle and may be more inclined to become permanent residents.

- Strategy: Retention strategies need to be researched by our Provincial government that will promote the benefits of staying in the Province. This could include stressing higher costs of living in other regions due to costs such as that for health care and insurance.

- Strategy: PIMA should continue to work with the government in a consultative manner to develop a solution for the long-term issue of people leaving the province. Joint discussion and cooperative ventures are the best solution.

8.3 COMMUNICATION STRATEGY

Recommendation: The results of the training and human resource needs assessment and the recommendations of the Steering Committee should be publicized.

- Strategy: PIMA will provide an executive summary to members through the newsletter and at the annual convention.

- Strategy: The media needs to be contacted to publicize the findings of the study as a way of promoting the industry.

8.4 SECTOR PARTNERSHIP

Employers and employees feel companies should continue to work together to address training and human resource issues for the agriculture implement manufacturing industry. PIMA should provide information on these issues to industry.

Recommendation: Industry should continue to work together to identify and address training and human resource issues.

- Strategy: PIMA has a role to play in terms of providing on-going co-ordination to the Sector Partnership.

- Strategy: Individual companies should continue to participate in addressing training and human resource issues through the Sector Partnership Steering Committee, by being requested or asked to provide input into what's happening in the industry and meeting at least annually to discuss developments, issues and needs.

9.0 Next Steps

One of the key components of the outcome of the research undertaken within this Sector Partnership was to develop effective partnerships, by way of human resource planning and skills training and between the private sector, training providers and the stakeholder communities.

Key to the success of this outcome is to ensure the work begun under the Sector Partnership initiative continues in one form or another. The results of the study provides many recommendations and strategies, by which are important to improving the competitiveness and the productivity within the industry. The results provide a "road map" for further work.

The research and work of the industry Steering Committee of this project has revealed many relevant recommendations and strategies to be undertaken. These are only the beginning because as the industry changes and evolves new and more challenging opportunities will arise. The Prairie Implement Manufacturing Association (PIMA) has a mandate to work on behalf of its members to continue the work begun by the Steering Committee that was formed to lead this phase of the project. PIMA needs to rely on the members of this committee to assist the organization in carrying out the recommendations and implementation the many strategies developed.

The Steering Committee is a valuable resource in which PIMA can consult with in taking this study to the next level.

Due to the fact the study has identified many different recommendations, along with many innovative and detailed strategies to undertake, the following are the key recommendations the Steering Committee has identified as the most important and should be the first ones PIMA addresses.

- PIMA will continue discussion with the Steering Committee and industry in nurturing and developing a strong partnership with the training institutions, especially SIAST, the regional colleges, DTI and SIIT by:
  - Making available and keeping current the training database of all courses and programs offered through these institutions; and
  - Identifying in the planning process ways to address issues such as training for new employees, retraining existing employees, addressing skill shortages, accessibility and better workplace training methods.
- PIMA will circulate back to the industry the results of the study and the on-going work of the Steering Committee through:
  - Publishing articles in the monthly newsletter "The PIMA Pulse";
  - Raising items of importance at such venues as the PIMA annual conference; and
  - Preparing a news release on the highlights and key findings.
- PIMA will start discussions with industry on aboriginal participation in the workforce and work with aboriginal organizations and training providers/consultants in gathering and

publishing information on causes and seminars on cultural diversity and workforce participation.

- PIMA will work with SIAST and the regional colleges to attain the necessary standards and certification of the Industrial Applications and Rotational Molders training programs, as well as other courses and programs that will become necessary as jobs change and new technologies emerge.
- PIMA will work industry and the Steering Committee to develop an outline of the employability skills necessary for employers to use when recruiting and selecting new employees.
- PIMA will work to develop a generic orientation checklist which will assist companies during the orientation process of new employees. This orientation is to be provided to all new employees and if available, the checklist should be included in the company's employee handbook.
- PIMA needs to continue to explore and facilitate opportunities and research methods by which companies can implement the use of technology in the workplace.

Appendix: Survey Instrument

Focus Group Moderator's Guide

Employee Discussion Group Guide

Hello, my name is _____. I am calling for Trimension Training and Consulting Group. We are doing a survey on behalf of the Prairie Implement Manufacturers Association about training and human resource issues. As a member of PIMA, we need and value your input. This is a project funded by the Saskatchewan Department of Post-Secondary Education and Skills Training.

This survey is being undertaken to benefit the Prairie Implement Manufacturing industry by providing a skilled and competent workforce for the industry.

Members of PIMA, will also benefit in a number of ways, including:

- the identification of current and future skilled employment needs in the industry, including shop floor and office type jobs.
- the development of strategies to address these employment needs, on an industry wide basis and regional basis.
- the improvement of the effectiveness of existing training programs, as well as development of new and improved approaches of training delivery.
- the establishment of a mechanism that will facilitate communication and dialogue between the industry, government and training providers regarding skilled workforce issues facing the industry.

Please be aware all your responses are confidential. Could we have approximately 20 minutes of your time to complete the survey?

Section One: Company Information

1. What business areas does your company compete in? (Check all that apply.)

- ❑ Storage equipment
- ❑ Tillage and seeding equipment
- ❑ Grain handling equipment
- ❑ Earth moving equipment
- ❑ Harvesting equipment
- ❑ Hay handling equipment
- ❑ Feeding and livestock handling equipment
- ❑ Monitors
- ❑ Rock removal equipment
- ❑ Soil preparation and seeding
- ❑ Sprayer and applicator equipment
- ❑ Truck boxes, trailers, transports, and accessories
- ❑ Other (please specify)_____

Section Two: Workforce Profile

2. What quarter(s) is/are your peak production times? (Check all that apply.)

   - ❑ Spring
   - ❑ Summer
   - ❑ Fall
   - ❑ Winter

3. How many people did you currently employ this year at your peak production period? How many did you employ during your low production period?

Current Number of Employees	
Peak	**Low**

4. How many people did employ at your peak production period LAST YEAR? How many did you employ during your low production period LAST YEAR?

Number of Employees Last Year	
Peak	**Low**

5. How many people do you expect to employ at your peak production period NEXT YEAR? How many do you expect to employ during your low production period NEXT YEAR?

Number of Employees Next Year	
Peak	**Low**

6. How many of your current employees have the following highest levels of education? Please estimate the number of employees in each category if you are not sure of the exact number. (NOTE: Some post-secondary includes any formal training after high school such as class at a technical institution, university, private vocational school, or extension program).

< Grade 9	Grade 9 - 12	Grade 12 completion	Some Post-secondary Education	Post-Secondary Certificate or Diploma	University degree

7. How many of your current employees are in the following age ranges? Please estimate the number of employees if you are not sure of the exact number in each age range.

16-24	25-34	35-44	45-54	55 and over

Section Three: Trends

8. The following is a list of occupations you may have in your company. Please indicate how many people ON AVERAGE you currently employ and how many people ON AVERAGE you expect to employ in 1 year in each of those occupations? If you do not currently employ anyone in any of these occupations please say none. If you do not currently employ anyone in any of these occupations, but expect to in 1 year, please indicate how many you expect to hire. If you currently employ people in any of the occupations, but do not expect to in 1 years, please indicate this. Provide your best estimate.

(Interviewer: If the respondent currently does not have an occupation he/she expects to have in five years, check none in the current column and the appropriate number in the In 1 Year column. If the respondent indicates his/her organization has occupations currently, but do not expect to have employees in those occupations in 1 year, check none in the In 1 Year column. If the respondent does not know how many employees they will have in any given occupation in 1 year, enter d/k for don't know. If the respondent expects to have the same number of employees in any occupation in 1 year, enter the number.)

Occupation	Average Current Number Employed		Average Expected Number Employed in 1 Year	
	Number	None (✓)	Number	None (✓)
Production line welders				
Painters				
Machine operators (lathe, press, drill, ironworker, shears, mill, saws)				
Fork-lift operators				
Shipping and receiving				
Mechanics				
Senior managers				
Sales				
Front-line supervisors				
Receptionist				
Secretary				
Book-keeper				
Accountant				
Other (please specify any occupations not covered in the list)				

What are some of the trends affecting your company in terms of training needs?

Section Four: Skill Deficiencies and New Skills

9. In which occupations do you need more training? What types of training are needed in each of those occupations? Please consider technical training, safety training, and interpersonal skills training, as well as employability or "life" skills training.

Occupation	Training
Production line welders	
Painters	
Machine operators (lathe, press, drill, ironworker, shears, mill, saws)	
Fork-lift operators	
Shipping and receiving	
Mechanics	
Senior managers	
Sales	
Front-line supervisors	
Receptionist	
Secretary	
Book-keeper	
Accountant	
Other (please specify any occupations not covered in the list)	

10. What types of new training will be needed in the near future for key occupations?

Occupation	Training
Production line welders	
Painters	
Machine operators (lathe, press, drill, ironworker, shears, mill, saws)	
Fork-lift operators	
Shipping and receiving	
Mechanics	
Senior managers	
Sales	
Front-line supervisors	
Receptionist	
Secretary	
Book-keeper	
Accountant	
Other (please specify any occupations not covered in the list)	

Section Five: Training

11. Do you currently provide training on-site using your own company trainers or employees?

- ❑ Yes

  If yes, what type of training?

  - ❑ Job-focussed technical skills
  - ❑ Computers
  - ❑ Safety
  - ❑ Cultural sensitivity/race relations
  - ❑ Interpersonal skills
  - ❑ Apprenticeship
  - ❑ Literacy
  - ❑ Numeracy
  - ❑ Employability (life) skills
  - ❑ Other: (please specify) _____

- ❑ No

12. Do you currently use training courses or programs provided by other training providers?

❑ Yes

If yes, what type of training and from where? Is it delivered on-site or off-site?

Type of Training	Training Provider	On Site or Off-site (Circle)
❑ Job-focussed technical skills		On Site or Off-site
❑ Computers		On Site or Off-site
❑ Safety		On Site or Off-site
❑ Cultural sensitivity/race relations		On Site or Off-site
❑ Interpersonal skills		On Site or Off-site
❑ Apprenticeship		On Site or Off-site
❑ Literacy		On Site or Off-site
❑ Numeracy		On Site or Off-site
❑ Employability (life) skills		On Site or Off-site
❑ Other (Please specify)		On Site or Off-site

❑ No

13. Given the expected increase in Aboriginal people of working age in the Province, do you anticipate using courses in cultural sensitivity or race relations in your company?

- ❑ Yes
- ❑ No
- ❑ Don't know

Why or why not?

14. Of the following reasons, please rate the extent to which you feel they are factors you consider when using training programs, on a scale of 1 to 5, with 1 being strongly disagree and 5 being strongly agree.

Barriers	Rating Strongly disagree ←→ Strongly agree	Reason
Cost to send employee (lost work time)	1 2 3 4 5 d/k	
Dollar cost of program/fees	1 2 3 4 5 d/k	
Length	1 2 3 4 5 d/k	
Location	1 2 3 4 5 d/k	
Value to business	1 2 3 4 5 d/k	
Timing of training during the year	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	

15. Of the following delivery methods for technical skills training, on a scale of 1 to 5, with 1 being very poor and 5 being excellent, please rate the methods as a form of training delivery. Why?

Method	Rating Very poor ← → Excellent	Reason
Classroom training	1 2 3 4 5 d/k	
Workplace training	1 2 3 4 5 d/k	
Combination of classroom and workplace training	1 2 3 4 5 d/k	
Correspondence courses	1 2 3 4 5 d/k	
CD-ROM or computer based training	1 2 3 4 5 d/k	
Courses over the Internet	1 2 3 4 5 d/k	
Job Coaching/Mentoring – On-site training of company employees and/or supervisors	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	

16. Which of the following are improvements that should be made to training programs for your industry in Saskatchewan? Please rate them on a scale of 1 to 5 where 1 is not at all necessary to 5 or very critical. Why?

Improvements	Rating Not at all necessary ←→ Very critical	Reason
More technical skills training	1 2 3 4 5 d/k	
Larger capacity programs	1 2 3 4 5 d/k	
Length of courses	1 2 3 4 5 d/k	Suggested length of courses:_____
More input from industry	1 2 3 4 5 d/k	
More emphasis on employability or life skills	1 2 3 4 5 d/k	
Trainers with industry experience	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	

Section Six: Recruitment and Retention

17. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, to what extent do you feel the following are barriers to your company attracting skilled labour?

Barriers	Rating Strongly disagree ←→ Strongly agree	Reason
Lack of technically skilled labour	1 2 3 4 5 d/k	
Lack of labour with employability or life skills	1 2 3 4 5 d/k	
People don't want a rural lifestyle	1 2 3 4 5 d/k	
Competition from other companies in industry	1 2 3 4 5 d/k	
Competition from other industries	1 2 3 4 5 d/k	
Labour intensive nature of work	1 2 3 4 5 d/k	
Cyclical nature of work in the industry	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	

18. On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, to what extent do you feel the following are barriers to your company retaining skilled labour?

Barriers	Rating Strongly disagree ←→ Strongly agree	Reason
Lack of technical skills	1 2 3 4 5 d/k	
Lack of employability or life skills	1 2 3 4 5 d/k	
People don't want a rural lifestyle	1 2 3 4 5 d/k	
Competition from other companies in industry	1 2 3 4 5 d/k	
Competition from other industries	1 2 3 4 5 d/k	
Labour intensive nature of work	1 2 3 4 5 d/k	
Cyclical nature of work in the industry	1 2 3 4 5 d/k	
Racial tensions or cultural differences	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	
Other (Specify)	1 2 3 4 5 d/k	

19. Is turnover a problem for your company?

- ❑ Yes

  If yes, what have you done to reduce turnover?

- ❑ No

20. There are expected changes in the demographics of our workforce, such as more women working outside the home, a shift from rural to urban in terms of population, and an increase in Aboriginal people of working age in the Province. How does your company anticipate dealing with these issues in terms of recruitment and retention?

21. What are the occupations in which you have the most difficulty recruiting? (Do not read list but check ones mentioned by respondert.)

- ❑ Production line welders
- ❑ Painters
- ❑ Machine operators (lathe, press, drill, ironworker, shears, mill, saws)
- ❑ Fork-lift operators
- ❑ Shipping and receiving
- ❑ Mechanics
- ❑ Senior managers
- ❑ Sales
- ❑ Front-line supervisors
- ❑ Receptionist
- ❑ Secretary
- ❑ Book-keeper
- ❑ Accountant
- ❑ Other (Specify): _____

Section Seven: Other Information

22. What do you think are the most pressing human resource issues including training issues facing the agriculture implement manufacturing industry in Saskatchewan? How can they be resolved?

Issues	Solutions

23. Would you please provide me the following information?

Contact Name: _____

Business Name: _____

Telephone Number: _____

Fax Number: _____

E-mail Address _____

Street Address: _____

City/Town/Box #: _____

Postal Code: _____

Thank you for your time and input.

A summary of the results will be provided in the PIMA newsletter.

FOCUS GROUP MODERATOR'S GUIDE

1. INTRODUCTION

1. Introduce yourself and Trimension Training & Consulting Group. Thank participants and introduce the topic for discussion: human resource issues and training needs in the farm implement manufacturing industry in Saskatchewan and strategies to address those needs.

2. Explain the function of focus groups – to discuss the human resource and training issues and the strategies to meet the needs of the industry.

3. Explain that this focus group and the surveys are being done on behalf of the PIMA Sector Partnership. This is a partnership between government, industry, and training providers to develop strategies to address human resource and training needs. The Partnership is coordinated by a Steering Committee of representatives from industry, training providers, government, Aboriginal groups, and labour. It is funded by the Department of Post-Secondary Education and Skills Training.

4. Explain there are no correct answers - only their opinions.

5. The goal of the focus group is not to gain consensus in the group, but rather to hear from everyone.

6. Discussions should be carried out with one person speaking at a time - no side discussions please.

7. Explain the group will be audio taped which will allow us to transcribe the results of the focus group when we are done.

8. Explain confidentiality issues.

9. Explain you will not be offering your opinions during the discussion. What we think or know about this subject is not important here today. We want to hear the feelings and opinions of participants.

10. Introduce all participants.

11. Any questions before we begin?

2. DISCUSSION QUESTIONS

The following recommendations are based on the results of the research and developed in consultation with the Steering Committee. First we'll go over the key findings in this are and then the proposed solutions. After each one we will talk about it.

2.1 YOUNG AND MOBILE WORKFORCE

Employees are younger and may be lacking employability skills. Another related challenge is that they are highly mobile and they may be unwilling to stay in the Province when they can go elsewhere for more money. Some may not be attracted to life in a rural community. This, combined with the cyclical nature of the industry, leads to challenges in retaining a skilled workforce.

1. Recommendation: Courses or support in employability skills training should be offered by employers to current employees, as well as using better recruiting practices.

2.2 INCREASING EMPLOYMENT

Companies in the industry expect to see a growth in the number of people employed, especially among welders, labourers, machine operators, front-line supervisors, painters, and sales.

1. Recommendation: The industry should work with training institutions and providers to ensure there are adequate training spaces and programs and courses for individuals or where training does not exist, work together to develop training programs for these occupations.

2. Recommendation: A formal training program in industrial painting should be considered for development and offered by training institutions. There may be opportunities to develop this program so it is adaptable to other industries, such as fibreglass manufacturing.

2.3 TRAINING ISSUES

Companies in the industry generally support on-going training of their employees, mainly in job-specific skills, safety, and computers. Training accessibility is an issue and most companies prefer on-site and on-the-job training, and many use their own employees to deliver the training. Other improvements needed include having up to date equipment at training institutions and instructors with relevant industry experience. Research showed many employers are not aware of available training programs and funding sources so more effective communication is required.

Overall, companies reported few skill deficiencies and most of the skill areas focus on computer training and using new techniques and equipment.

Timing of training courses offered at training institutions emerged as an important factor as to whether or not companies decide to send employees.

Companies in general felt that the need for cultural diversity training depends on whether Aboriginal people are employed in their company. Many felt that they have no strong need for such training as they have no problems or few Aboriginal employees.

1. Recommendation: Industry and training providers should work together to develop training programs that can be delivered on-site or at appropriate times during the year to address the issues of training accessibility. Training provided by companies should be provided accreditation and train-the-trainer programs. Encouraging internal training would address the need for trainers with industry experience and using up to date equipment as companies would be offering training using their own employees on their own shop floor.

2. Recommendation: Information on training programs and funding should be readily accessible to all industry members in the form of a centralized information source and regular promotion.

3. Recommendation: Tax credits for companies offering training should be researched in addition to funding programs to enable small and medium sized companies access to provincial training incentives.

4. Recommendation: Cultural diversity training is an area that may need to be explored by the industry. While there does not appear to be a strong need or demand at present, as our workforce changes in terms of demographics there may be a need for this in the future. Awareness of cultural diversity issues must be raised with employers even if there are no obvious problems in the company.

2.4 RECRUITING AND RETENTION

Some companies have difficulty recruiting because of rural location (housing) and competition from other companies in industry, as well as there being a lack of skilled people available. One issue of concern to this industry is that young people may not be attracted to the industry and prefer working in an office or similar environment as opposed to outdoors or on a shop floor.

Companies with retention problems cited poor employability skills, their rural location, competition from other industries (money and location). Most just accept turnover as part of doing business and address it through recruitment or by offering better pay, benefits, and trying to improve the work environment. Companies are having difficulty in recruiting skilled welders, journey persons in some of the other trades (especially maintenance), engineers, machine operators, painters, and accountants.

Anticipated changes in the Saskatchewan labour market such as more women working, more Aboriginal people entering the workforce, and a rural to urban shift are issues for companies that can be overcome. They feel that their hiring policy of selecting the best person for the job addresses these challenges.

1. Do you think turnover is a problem in your company?

2. Recommendation: When recruiting, especially for the rural companies, they should advertise the benefits of living and working in their community. This way they will attract individuals to their community that would be interested and informed about the merits of this lifestyle and may be more inclined to become permanent residents.

3. Recommendation: There needs to be innovative approaches to promote living and working in rural communities. We should learn form the successes of companies who have achieved this. These companies could serve as role models for other companies facing this challenge.

4. Recommendation: Retention strategies need to be researched that will promote the benefits of staying in the Province. This could include stressing higher costs of living in other regions due to costs for health care and insurance.

5. Recommendation: Courses or support in employability skills training should be offered by companies to current employees, as well as using better recruiting practice to avoid making mistakes in hiring.

6. Recommendation: Companies may need to have be more proactive in anticipating changes in terms of demographics and adapt HR policies to fit the situations. Recruiting could be focussed on attracting Aboriginal people and women.

7. Recommendation: Industry should work with training institutions to offer co-operative education or summer employment in those occupations for which they have difficulty recruiting to address their needs as well as attract new graduates. Gaining experience and a better understanding of career opportunities will enhance the industry's ability to develop and maintain a competitive and productive workforce.

2.5 CYCLICAL NATURE OF INDUSTRY

A key issue to this industry is its cyclical nature. While some companies address this through business strategy, many companies experience lay offs. Companies may feel reluctant to provide training when employees may not be permanent employees and are highly mobile. Consequently, employees that are laid off may leave the province resulting in an overall skill shortage for the industry.

1. Recommendation: Strategies should be developed through additional research and consultation that would lead to increased stability for the industry so that long-term human resource planning can be undertaken. Support should be given to those companies willing to participate in this research and dialogue.

2.6 ATTRACTING AND RETAINING LABOUR IN SASKATCHEWAN

Companies expressed their difficulties in attracting and keeping skilled labour in Saskatchewan, especially rural Saskatchewan, when many skilled, young people are moving away. Many employers cited the high personal income tax and sales tax as being a major issue.

1. Recommendation: The government needs to be lobbied in a consultative manner to develop a solution for this long-term issue. Joint discussion and cooperative ventures are the best solution.

2.7 SECTOR PARTNERSHIP

1. Do you see a need for a Sector Partnership to address the human resource and training needs of the industry?

2. How would information about training programs, government funding programs and labour market information be useful to you? What type of information would you need?

3. Would you be interested in an annual conference on human resource issues and training in the industry?

Are there any final questions, comments or suggestions?

ON BEHALF OF TRIMENSION GROUP AND THE PIMA SECTOR PARTNERSHIP, I WOULD LIKE TO THANK ALL OF YOU FOR TAKING THE TIME TO PARTICIPATE.

EMPLOYEE GUIDE

1. INTRODUCTION

1. The function of the employee sessions is to discuss the results of the research that was conducted with agricultural implement manufacturers in the province. We intend to discuss the human resource and training issues and the strategies to meet the needs of the agricultural implement manufacturing industry and PIMA members.

2. Explain that this session and the surveys were done on behalf of the PIMA Sector Partnership. This is a partnership between government, industry, and training providers to develop strategies to address human resource and training needs. The Partnership is coordinated by a Steering Committee of representatives from industry, training providers, government, and Aboriginal groups. It is funded by the Department of Post-Secondary Education and Skills Training.

3. There are no correct answers - only opinions.

4. The goal of the employee sessions is not to gain consensus in the group, but rather to hear from everyone.

5. Discussions should be carried out with one person speaking at a time. No side discussions please.

6. We will be making some notes as we go along, which will allow us to report the results of the sessions when we are done.

7. All information obtained will be kept confidential.

8. Trimension Group will not be offering opinions during the discussion. What we think or know about this subject is not important here today. We want to hear the feelings and opinions of participants.

2. DISCUSSION QUESTIONS

Explain that the PIMA Sector Partnership Steering Committee has identified some potential strategies for dealing with the human resource issues and training needs in the industry. They would like to get your comments on these strategies.

2.1 TRAINING ISSUES

It has been said that some employees may be may be lacking employability skills, like communication, literacy, problem-solving, being dependable and having a good work ethic, and teamwork.

- *Whose responsibility do you think it is to ensure employees have these kinds of skills? The education system, employers, or employees?*

- *Do you think that courses or support in employability skills training should be offered by employers to current employees?*

The following questions focus more on job-related skills training?

- *Would you take more training if it were made available to you?*

- *What kind of training would be useful to you?*

- *What kind of training would be useful to your employer?*

- *Who should pay for training? (Probe: The government? The employer? A mix?)*

- *If you have a trade or post-secondary certificate, why did you pursue it? (Probe: Was it an area you were interested in? Thought it was in demand? Made you more employable? Other reasons?)*

- *In your opinion, how and where is training best provided? By whom?*

2.2 DIVERSITY ISSUES

Companies in general felt that the need for cultural diversity training depends on whether Aboriginal people are employed in their company. Many felt that they have no strong need for such training as they currently have few Aboriginal employees working for them.

Anticipated changes in the Saskatchewan labour market such as more women working, more Aboriginal people entering the workforce, and a rural to urban shift are issues for companies that must be addressed. They feel that their hiring policy of selecting the best person for the job addresses these challenges.

- *Do you have any suggestions as to how to get the message out to Aboriginal communities about career opportunities in the industry?*

- *Do you have any suggestions as to how to get the message out to women about career opportunities in the industry?*

- *One recommendation is that diversity training (women and Aboriginal issues) is an area that may need to be explored by the industry. Do you think diversity issues must be addressed?*

- *How else can these issues be best addressed by industry?*

2.3 RECRUITING AND RETENTION

One item of concern to this industry is that young people may not be attracted to the industry and prefer working in an office or similar environment as opposed to outdoors or on a shop floor.

Employers stated that retention problems are usually associated with poor employability skills, rural location, and competition from other industries (money and location). Most employers just accept turnover as part of doing business and address it through recruitment and some offer better pay, benefits, and trying to improve the work environment. Companies are having difficulty in recruiting skilled tradespeople, especially journey persons in some of the trades. Other occupations that are difficult to recruit for include: engineers, machine operators, painters, and accountants.

It is also difficult to attract and keep skilled labour in Saskatchewan, especially rural Saskatchewan, when many skilled, young people are moving away. Some of the reasons cited were high personal income tax and sales tax as being major issues.

- *What do you think it would take to motivate youth (High School age) into a career in the trades or the agricultural implement manufacturing industry? i.e., more involvement of companies at schools (class presentations)*

- *Do you think youth would be motivated to enter the industry, related training, or a trade if there was a promise of employment at the end of training?*

- *What attracts skilled workers to other provinces? What makes you stay in Saskatchewan? (better wages, better benefits, better career opportunities, better training, recognizing seniority, better shift scheduling, scheduling, other reasons)*

- *What attracts skilled workers to other companies in Saskatchewan? What makes you stay at your company? (better wages, better benefits, better career opportunities, better training, recognizing seniority, better shift scheduling, scheduling, other reasons)*

2.4 SECTOR PARTNERSHIP

- *Would information about training and career information be useful to you? What type of information would you need? How could you best access this information? What would you do with this information?*

Are there any final questions, comments or suggestions?

ON BEHALF OF TRIMENSION GROUP AND THE PIMA SECTOR PARTNERSHIP, I WOULD LIKE TO THANK ALL OF YOU FOR TAKING THE TIME TO PARTICIPATE.